

**New Degree Program Proposal  
Applied Baccalaureate Degree Program**



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**Form C**

**COVER SHEET  
NEW DEGREE PROGRAM PROPOSAL**

**Program Information**

Program Name: Bachelor of Applied Science in Allied Health

Institution Name: Seattle Central Community College

Degree: BAS Allied Health      Level: Bachelor    Type: (Science) Allied Health      CIP Code: 51.0801  
*(e.g. B.S. Chemistry)*      *(e.g. Bachelor)*      *(e.g. Science)*

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Date

**Proposal criteria**

Please respond to all 10 areas listed in proposal criteria Form D

## Form D

### Criteria 1 Curriculum demonstrates baccalaureate level rigor

Seattle Central Community College proposes a Bachelor's of Applied Science in Allied Health Sciences starting in 2015. The degree is designed for allied health graduates who have completed allied health occupational certificates, health related professional licenses, and allied health associate degree programs. The program will draw students from Washington's community and technical colleges who have completed associate degrees and certificate programs as well as from incumbent workers seeking career advancement and diverse job opportunities. Graduates will meet the growing demand for baccalaureate level allied health practitioners in Seattle-King County area who possess complex behavioral and technical skills in specific allied health fields, plus the superior knowledge, leadership, and critical thinking skills associated with higher education.

#### The program's mission statement:

To provide pathways to higher education that broaden and expand the capabilities of allied health professionals as clinicians, leaders, managers, researchers, educators and members of healthcare teams.

Program outcomes and curriculum were developed in a collaborative process involving allied health faculty, the dean of allied health, directors and coordinators of allied health programs, instructional, administrative, and research specialists, the director of the college's BAS in behavioral health and human services, the vice-president for workforce education, associate vice-chancellor for baccalaureate programs, and the vice-president of instruction.

This team reviewed program outcomes achievable through courses to be offered in this degree. The BAS stresses the inclusion of core requirements to integrate and apply knowledge across tracks, and to insure workforce application through required internships, capstone courses and practicum in industry. Common course content is reflected in core requirements which are similar for allied health students in every track. Sequencing of courses promotes concept reinforcement and development of specialized clinical skills.

The program promotes and enhances Seattle Central Community College's 2011-2016 mission and strategic goals to:

- Promote student success in achieving their educational goals and personal growth by adding a pathway to baccalaureate degree completion for occupational and technical healthcare workers whose current access to a bachelor's degree is limited or restricted.
- Create a quality, integrated, sustainable and productive educational environment by building on existing professional and technical programs at the college.
- Adopt a responsive, forward-looking educational business model by adjusting revenue to more closely reflect the costs of professional/technical education.
- Increase operational efficiencies and effectiveness, and create a culture of assessment at all levels by creating an integrated organizational structure that streamlines processes and assessment.

#### Learning Outcomes, Evaluation Criteria and Process

Students who successfully complete the BAS degree achieve the program's learning outcomes listed in Table 1. The program fosters in-depth conceptual and scientific understanding, improved evaluation and judgment, and higher level clinical skills. Evaluation of outcomes is measured throughout the program in individual courses, through simulation and objective performance measures, through practicum capstone projects and evaluation in the workplace and internships. In addition to program level outcomes, each track within the degree has additional learning outcomes specific to that track.

**Table 1: BAS Allied Health Sciences: Learning Outcomes, Evaluation Measures and Timing of Evaluation Processes**

Learning Outcomes	Measures	Timing
1. Apply theoretical knowledge meeting workforce expectations and/or licensure requirements in an allied health occupation and promotes student success beyond the baccalaureate level.	Successful course completion, prior learning assessment, internship, capstone project	Prior learning assessment at beginning of study; during program of study
2. Perform clinical skills with appropriate instruments, diagnostic and therapeutic equipment to meet workforce expectations and licensure requirements at the baccalaureate level in an allied health profession or occupation.	Successful course completion, prior learning assessment, internship, capstone project	Prior learning assessment at beginning of study; during program of study
3. Know and apply ethical standards to professional practice in allied health.	Capstone project, portfolio development, presentations, clinical evaluations, employer satisfaction surveys	During program of study, end of program project
4. Communicate orally and in writing at the baccalaureate level.	Capstone project, portfolio development, presentations, clinical evaluations, employer satisfaction surveys	During program of study, end of program project
5. Leverage technology to meet workplace expectations.	Student presentations, team leadership, clinical record-keeping, graduate employer surveys	During program of study, end of program project
6. Effectively lead and collaborate in high performance environments and inter-professional, multi-dimensional work groups.	Leading team projects; simulation exercises; employer, faculty and peer evaluations; client critiques, internships and practicum evaluation	During program of study, end of program project
7. Critically evaluate and apply evidence-based practices and published research to healthcare delivery.	Successful course completion, capstone project, clinical evaluations, simulations, presentations, internship evaluation	During program of study, at end of program project
8. Exhibit culturally competent care with patients and families, healthcare team members, and members of the public in the workforce environment.	Capstone project, performance presentations, clinical evaluations, satisfaction surveys	During program of study; internship, and employer surveys
9. Self-evaluate personal performance on the job identifying gaps in skills and knowledge.	Successful course completion, capstone project, clinical evaluations, simulations, presentations, internship evaluation	During program of study, at end of program project
10. Incorporate professional development and new knowledge into healthcare practice on an ongoing basis.	Clinical evaluations, simulations, successful learning assessments, peer and faculty evaluations	During program of study; internship and end of program project

## Overview of Degree Components and Requirements

The Bachelor of Applied Science (B.A.S.) in Allied Health Sciences degree is a minimum 180 quarter credit program outlined in Table 2. The curriculum for the BAS degree in Allied Health Sciences builds on the content and skills of the feeder associate degree programs and more than meets college and state requirements in general education and foundational coursework for a baccalaureate degree. General education requirements include courses earned at either/both the associate degree and/or applied bachelor's degree level, based on the total required 180 quarter hours of credit. Students must earn a cumulative grade point average of at least 2.0 calculated by the degree awarding institution to qualify.

Based on Instruction Commission recommendations passed in May 2011, a minimum of 60 quarter hours of general education courses, including science (natural world) are required. Because science forms the foundation for healthcare, the proposed BAS in allied health sciences requires a heavier concentration of natural world science requirements. These will largely be met through the students' associate's level allied health professional/technical/workforce course work.

**Table 2: BAS in Allied Health Degree Requirements**

<b>General Education Requirement</b>	General Education Courses <b>40</b>	Science Foundational Courses <b>40</b>	<b>80 Credits</b>
<b>Allied Health Requirements</b>	Track Specific Didactic Courses <b>30</b>	Upper-Division Core Courses <b>30</b>	<b>60 Credits</b>
<b>Electives</b>	<b>40 Credits</b>		
<b>TOTAL:</b>	<b>180</b>		

The general education distribution requirement totals eighty (80) credits. In keeping with State policy, the degree accepts 120 lower division credits and requires a minimum of 60 upper division credits for the degree. Lower division study gives students the flexibility to deepen their general knowledge in foundation courses, strengthen skill sets or broaden theory. It provides flexibility to accommodate students' needs from diverse occupational backgrounds enrolling in the degree program.

Prior learning experience credit allows and encourages transition from the occupational and technical level to the baccalaureate level. This includes training, work experience and job experience outside of credit coursework that enhances specialized or general knowledge, analytical abilities, or critical thinking skills associated with higher education and upward mobility in the healthcare workforce. Prior learning experience credit may satisfy up to 25 credits of coursework when evaluated and approved by the college and the program. Credit for prior experiential learning will only be considered for professional or technical coursework after students have successfully completed at least one quarter (15 credits) in allied health.

The allied health portion of the BAS degree consists of sixty (60) credits, thirty (30) of which are in core requirements and thirty (30) are didactic courses from a selected allied health track. Core requirements include statistics or biostatistics, research methods, capstone, and an applied practicum. The practicum or internship provides workforce experience in the community and may serve as the basis of the capstone project. Additional core courses, selected from a core course list, are outlined in Table 3. New courses are noted with an XXX number while existing upper division courses, drawn from the college's current BAS degree in social and behavioral health, are noted with the current course number. Considerable integration with the existing BAS is expected when the program is fully functional.

In addition to the core course requirement, students must select 30 upper-division credits clustered in one of four allied health tracks. The tracks are dental hygiene, respiratory care, healthcare services management, and community health & education. Each track provides advanced workforce skills and academic depth through upper division credits. Tracks address specific learning outcomes tied to various career directions and prepare graduates for advanced workforce positions in industry.

### General Education Components

#### Year 1-2 General Education Requirement (40 credits)

ENGL& 101	Composition I	5
ENGL& 102	Composition II	5
MATH& 107	Math in Society or higher	5
SOC& 101	Intro to Sociology	5
ANTH& 206	Cultural Anthropology	5
PSYC& 100	General Psychology or &200, &240	5
HUM 105	Intercultural Communication	5

Various MIC 101	Humanities elective Microcomputer or SAM challenge optional	5
<b>Year 1-2</b>	<b>Health Science Foundation</b>	<b>(40 credits)</b>
BIOL& 241	Human Anatomy & Physiology I	5
BIOL& 242	Human Anatomy & Physiology II or *approved	5
BIOL& 128	Human Anatomy & Physiology	5
BIOL& 260	Microbiology or *approved	5
RCP 112	Applied Microbiology and Chemistry	2
CHEM& 121	Intro to Chemistry	5
CHEM& 122	Intro to Organic Chemistry	5
CHEM&123	Fundamentals of Biochemistry	5
NTR 150	Human Nutrition	5
AHE165-168	Medical Terminology	10
DHY 105	Oral Biology	2
DHY 12	Oral Pathology	2
DHY 109	Human Pathophysiology	2
DHY 107	Pharmacology	3
HIV/AIDS	Approved by state for healthcare worker training	2
CPR	Approved by state for healthcare worker training	2
PHYS& 100/121	General Physics	5
BIOL& 100/101	General Biology	5
Additional	*as approved by track	

### Transfer Students Course Preparation

Students completing an associate's degree program in an allied health or related field may transfer into Seattle Central's BAS program with:

- 30 General education credits
- 30 Science foundational credits
- 30 Allied health science workforce program credits
- 90 Total credits and an associate's degree

Seattle Central is committed to facilitating entry into the BAS. The college is currently exploring articulations with local colleges including Lake Washington Institute of Technology, Shoreline and Pierce Community Colleges to simplify admission. Additional articulations are expected as the program develops.

### Course Work Needed at the Junior and Senior Level

Students entering the BAS in allied health at the junior and senior level will complete 30 credits of allied health core courses, 30 upper-division credits in an allied health track, plus elective courses. Allied health requirements are outlined in Tables 3.

**Table 3: Allied Health BAS Requirements**

<b>Required Core Coursework</b>	<b>(30 credits)</b>
• Introduction to Biostatistics or equivalent	5
• Research Methodology and Quantitative Principles	5
• Field Training, Advanced Practicum or Internships	10-15
• Capstone	3-5
• Additional as needed selected from core list	

### Core Course List

HSM/AHS XXX	Healthcare Delivery Systems	3-5
CHE/AHS XXX	Principles of Higher Education and Training	5
ABS 310	Professionalism and Ethical Practice	5
ABS 330	Information Literacy	5
ABS 350	Quantitative Principles in Research	5
ABS 340	Applied Environmental Science	5
ABS 330	Information Literacy	3-5
HEA 225, 226	Global Health, Personal Health	3-5
DHY 109	Human Pathophysiology	2

RCP 123-126	Pathophysiology for RCP Care I-IV	4
DHY 107	Pharmacology	3
RCP 115-119	Pharmacology for RCP Care I-IV	4
AHS XXX	Independent Study in Allied Health Sciences	1-10
AHS XXX	Undergraduate Research	2-10

**Required Track Course Credits**

**(30 credits)**

- Dental Hygiene 30
- Respiratory Care Practice 30
- Healthcare Services Management 30
- Community Health & Education 30

Elective credits which make up the remainder of the degree requirement consist of courses with special appeal to the student complementing and extending career preparation. These may be taken outside or within the allied health division from the core course list, from track courses, or from courses offered through the college’s existing baccalaureate program in behavioral health established in 2008. Some tracks, i.e. dental hygiene and respiratory care, substitute required courses for electives when necessary for licensure.

**Planned Phase-in of Allied Health Baccalaureate**

Initially the BAS will start implementation transitioning from existing programs in dental hygiene and respiratory care. Thereafter, 20 dental hygiene and 25 respiratory care students will be admitted annually into a BAS degree program in a full-time cohort model. Students enter the program with broad general education and science prerequisites, some workforce skills, and an associate’s degree. The baccalaureate in dental hygiene and respiratory care represents the first phase of BAS program implementation and builds directly on Seattle Central’s existing programs in dental hygiene and respiratory care. Current faculty is involved in program development, broadening, modifying, and developing coursework, sequence, policies, and entrance requirements. For the transition, these programs will select students in 2014 who anticipate starting baccalaureate study in 2015. Both dental hygiene and respiratory care are license-regulated and governed by accreditation bodies that are currently overseeing baccalaureate curriculum development and implementation plans. Faculty has made considerable progress. In both respiratory care and dental hygiene, faculty work with accreditors to insure transition of the existing programs into a baccalaureate program while maintaining full oversight and accreditation standards. Thirty-seven courses in dental hygiene and 40 in respiratory care are currently under supervised revision with approval expected in the fall of 2013 from the Curriculum Approval Committee and the respective accreditation bodies. The college is on schedule for the planned 2014 student enrollment as the programs expect a seamless transition for students pursuing baccalaureate studies in 2015.

The second phase of BAS implementation is aimed at non-cohort full-time and part-time transfer students. These students may have allied health associate’s degrees from a broad number of programs such as medical assisting, dental assisting, pharmacy technician, dispensing optician, or surgical technology. They may come from allied health programs outside the district and college and/or have degrees awarded prior to the BAS program. They are incumbent workers with professional licenses/certificates, significant work experience, and an earned associate’s degree who lack alternatives for baccalaureate completion. The program allows them flexibility to study either full-time or part-time in a non-cohort model. Tracks in healthcare services management and community health & education are specifically framed to meet their needs. Students may plan for a two year full-time or three year part-time program of study, with students requesting longer time-frames accepted into tracks on a space-available basis.

The track in healthcare services management will admit 30 students annually. The program focuses on entry level administrative skills in planning, coordination and supervision of the delivery of healthcare services and management of personnel, and performance within a department. Graduates may consider upward mobility in their existing workplace such as hospitals, medical care facilities, healthcare organizations, or private offices in addition to new career opportunities. The track broadens the student’s background in human services, healthcare services management, financial planning, budgeting, billing, and administration.

The track in community health & education will admit 30 students annually. The program focuses on educational and behavioral aspects of preventive medicine, health communications and healthcare training. Graduates may consider careers with voluntary health organizations such American Cancer Society, in public sector agencies such as public health, in patient care center, hospitals, and medical institutions for staff training, and in teaching at colleges and technical institutions. The track broadens the student’s background in assessment and planning of health education, educational and communications interventions, implementation of community prevention programs, as well as educational methodology and teaching.

Completion and finalization of course syllabi for all track coursework is expected in 2015 anticipating the enrollment in the program of non-cohort transfer students in 2016.



## **Four Allied Health Tracks in Detail**

An allied health student must select a track within the program for 30 credits of coursework which define the context for applied practicum and capstone requirements. The track targets the student's career plans within healthcare and links the student to industry and future employment experience. Each track within allied health discussed below has specific learning outcomes and required courses depending on licensing and credentials required by the State. Two tracks primarily support students whose primary credential requires licensure. They are dental hygiene and respiratory care. These programs have been built on existing associate's degrees within the college. Two of the tracks primarily support transfer students who require access to baccalaureate degrees to further career development. They are community health & education and healthcare services management. All tracks streamline baccalaureate degrees for incumbent healthcare workers who lack pathways.

### **Dental Hygiene Track**

Dental Hygiene Learning Outcomes:

BAS Graduates of the Seattle Central Dental Hygiene Program should:

1. Students will successfully meet the essential competencies and learning outcomes as outlined in by Seattle Central Community College, the Allied Health BAS Program, and the Dental Hygiene Program including course outcomes and goals.
2. Qualify for all national and regional examinations required to obtain licensure as a Registered Dental Hygienist (RDH) and expanded duties as allowed by Washington State practice act.
3. Apply ethical standards and professionalism in the practice of dental hygiene.
4. Communicate orally and in writing and leverage technology to meet workplace expectations.
5. Effectively lead and collaborate as members of inter-professional, multi-dimensional work groups in delivering oral health care.
6. Critically evaluate and apply evidence-based practice and published research to the practice of dental hygiene.
7. Exhibit culturally competent care with patients, healthcare team members, and members of the public in the healthcare work environment.
8. Assume leadership roles and responsibilities appropriate to occupational expectations.
9. Self-evaluate personal performance on the job identifying gaps in skills and knowledge.
10. Incorporate professional development, further academic success, and new knowledge into health care practice on an ongoing basis.

### **Dental Hygiene Upper Division Core Courses:**

All courses in the existing associate's dental hygiene program were re-designed and new outlines created at the appropriate level. These have been reviewed by Seattle Central's Course Approval Committee. New course numbers have been assigned by the District. Courses at the required levels will be ready for implementation starting in the Spring of 2014 when the first cohort will be enrolled in the transitional courses. They will begin the bachelor's degree in January of 2015. Specific courses and sequence for dental hygiene is found in the appendix. Upper division courses include:

DHY	Fundamentals of Dental Hygiene Theory Course Series
DHY	Advanced Practice in Restorative Practice and Materials Science
DHY	Advanced Practice in Oral Anesthesia and Pain Control
DHY	Periodontology; Professional Issues; Selective Populations
DHY	Community Dental Health Course Series
DHY	Clinical Dental Hygiene Practicum and Internships
DHY	Capstone project
	Additional expected by dental hygiene faculty/college

### **Respiratory Care Track**

Respiratory Care Learning Outcomes

BAS graduates of the Respiratory Care Program should:

1. Perform quality respiratory care using affective, psychomotor and cognitive skills.
2. Provide a safe environment while delivering all aspects of respiratory care.
3. Incorporate knowledge of legal and ethical issues into respiratory care practice.
4. Communicate effectively with clients, families, significant others and all members of the healthcare team.
5. Promote cardiopulmonary health and wellness.
6. Participate in activities that support the profession of respiratory care.
7. Integrate evidence based practice into respiratory care.
8. Incorporate an understanding of health, illness, and cultural diversity into all aspects of respiratory care.
9. Utilize leadership principals to guide teams toward achievement of a common goal.
10. Teach individuals and groups to achieve and maintain an optimum level of wellness.

11. Synthesize new concepts by integrating prior learning, life experience and generalizing theoretical knowledge.
12. Use the principals of life-long learning to identify and address one's own limitations of knowledge, and skill.

### **Respiratory Care Upper Division Courses**

Curriculum in the existing associate’s respiratory care program was re-designed and new course descriptions created at the appropriate level. These have been reviewed. New course numbers have been assigned by the District. Courses at the required levels will be ready for implementation starting in the Spring of 2015 when the first cohort will transition into the bachelor’s degree. Specific courses and sequence for respiratory care is found in the appendix. Upper division courses include:

RCP	Respiratory Care Clinical Practice, Internships and Rotations
RCP	Pathophysiology for Respiratory Care and Physiology
RCP	Pharmacology for Respiratory Care
RCP	Respiratory Care Fundamentals and Advanced Assessment
RCP	Equipment and Techniques
RCP	Advanced care, Specialized care, and Targeted care courses
RCP	Capstone

### **Healthcare Services Management Track**

Healthcare Services Management Learning Outcomes

BAS graduates in healthcare services management should:

1. Critically appraise social, behavioral, and environmental factors that influence the context, efficiency and quality of healthcare delivery services.
2. Analyze laws and regulatory policies related to healthcare organizations and determine organizational compliance.
3. Create work schedules and supervise staff in a health services environment.
4. Apply research methods to select strategies, collect and manage data, evaluate programs, and implement assessment.
5. Manage the finances of a healthcare facility including patient fees and billing procedures.
6. Organize and maintain service records to meet record-keeping requirements of healthcare facilities.
7. Demonstrate effective communication and management skills.
8. Resolve practical managerial issues and problems within healthcare organizations.

### **Healthcare Services Management Upper Division Courses**

Thirty credits of upper-division courses for healthcare services management are in development. Track learning outcomes and course descriptions have been created and approved. These have been reviewed by Seattle Central’s Course Approval Committee Chair. Specific courses and sequence for full-time study in healthcare services management is found in the appendix. Course outlines are scheduled to be completed in 2014-2015 in advance of the first transfer students in 2016.

**Upper division courses include:**

HCM	Introduction to Health Services Systems	5 credits
HCM	Health Services Management	5 credits
HCM	Financial Management in Healthcare	5 credits
HCM	Law and Ethics in Health Administration	5 credits
HCM	Human Resources	5 credits
HCM	Strategic Planning and Marketing	5 credits
HCM	Health Informatics	5 credits
HCM	Applied Practicum	2-10 credits
HCM	Capstone	2-5 credits

### **Community Health & Education Track**

Community Health & Education Learning Outcomes

BAS graduates in Community Health & Education should:

1. Evaluate individual, community and institutional needs, assets and capacity for health education and training.
2. Assess behavioral and cultural factors that impact health communications and healthcare delivery.
3. Plan and implement health communications interventions, educational strategies, and behavior change programs for the individual, group, community, or institution.
4. Serve as a community health and education resource person.
5. Communicate and advocate for health and health education at all levels.
6. Evaluate research and design program evaluation to assess health education and community health programs.

### Community Health & Education Upper Division Courses

Thirty credits of upper-division courses for community health & education are in development. Track learning outcomes and course descriptions have been created and approved at the appropriate level. These have been reviewed by Seattle Central's Course Approval Committee Chair. Specific courses and sequence for full-time study in community health & education is found in the appendix. Course outlines are scheduled to be completed in 2014-2015 in advance of the first transfer students in 2016.

CHE	Introduction to Community Health & Education	5 credits
CHE	Health Behavioral Change Theoretical Foundations	5 credits
CHE	Social Determinants of Disease	5 credits
CHE	Community Education Program Planning and Evaluation	5 credits
CHE	Leadership and Team building	5 credits
CHE	Principles of Higher Education and Professional Training	5 credits
CHE	Provider-Patient Communication	5 credits
CHE	Healthcare Disparities	5 credits

### Criteria 2 Qualified Faculty

#### Biographies of faculty qualified to teach in the program:

The HEC Board policy requires that faculty are professionally prepared graduates of accredited institutions adequate to sustain a rigorous program. A majority of Seattle Central faculty currently teaching courses for allied health division students have achieved degrees at the Doctoral and Master's level degree levels. Current faculty will continue to teach in their areas of specialty. Several are qualified to teach in more than one track. Table 4 outlines existing employees, their degrees and content areas, and the track(s) within which they are qualified to teach. Faculty members designated "F" are now full-time employees of the college. A "P" indicates current part-time employees. Most are qualified to teach many courses within a given track and across tracks set out in this document. The assignment of courses in a given quarter will be determined by the dean of allied health, the directors of the BAS allied health program and the track coordinators. Four new full-time tenure track faculty members and part-time faculty hours are needed to meet the increase in FTE expected as a result of the BAS program (See Table 7). Among the full timers are coordinators for the tracks in community health & education and healthcare services management. Applicants qualified to teach in more than one track are preferred for new positions. Applicants with a Master's degree and teaching experience will be considered, with a doctoral degree strongly preferred.

**Table 4: Existing Profiles of Faculty at Seattle Central**

Faculty Name	Credentials/Content Areas	Status	Track(s) Qualified to Teach
Alibhai, Salima	MPH, BS; Dental Hygiene, Public Health, Community Health	P C	Community Health & Education, Dental Hygiene
Canfield, Ona	MEd, BS; Post-secondary Teaching, Human Resources Management, Dental Hygiene	F C	Healthcare Services Management, Dental Hygiene
Baca, Cecilia	MEd, BS; Adult Education, Community Health, Dental Hygiene	F C	Community Health & Education, Dental Hygiene
Bonsu, Osei	PhD; MBA, BS; Political Science, Business Administration	P C	Healthcare Services Management
Brankovan, Vera	PhD; MBA; Human Physiology, Health Administration	P C	Healthcare Services Management
Chenu, Katie	PhD, MS, BS; Environmental Sciences	F C	Allied Health Core
Delaney, Stephanie	PhD, MS, BS; Distance Learning, Ethics and Jurisprudence	FC	Allied Health Core
Douma, Shelley	PhD, MA, BA; Technical Writing	F C	Allied Health Core
Garcia, Candida	Doctorate, BS; Restorative Dentistry, Dental Hygiene, dental anatomy and physiology	PC	Dental Hygiene
Goglia, Fred	Med, BS; Respiratory Care, Post-Secondary Education	F C	Respiratory Care
Jurich, Michael	DMD; BS; Clinical Dentistry, Community Health, Dental Hygiene	F C	Dental Hygiene
Mahoney, Scott	BA; Respiratory Care, Community Practicum	F C	Respiratory Care
McKenna, Bruce	PhD, MA, BA; English, Technical Writing	F C	Allied Health Core
Hartnett, Jolene	MS (in progress), BSDH; Dental Hygiene, Post-Secondary Education	F C	Dental Hygiene, Allied Health Core, Community Health & Education
Henrichsen, Leo	DDS, BS; Clinical Dentistry, restorative dentistry, dental hygiene	P	Dental Hygiene
Insley, Andrea	EdD, MA, BA; International Education, Global Health, international practicum	F C	Allied Health Core, Community Health & Education

Faculty Name	Credentials/Content Areas	Status	Track(s) Qualified to Teach
Koutsoumbas, Margarita	DDS, BS; Community Dentistry, Dental Hygiene, Restorative Dentistry	P C	Allied Health Core, Dental Hygiene
Lin, Stacy	DDS, BS; Dentistry, Dental Hygiene	P	Dental Hygiene
Malyon, Jeffrey	DDS,BS; Dental Hygiene, Community Health and Education	P	Community Health & Education, Healthcare Services Management
McClellan-Riggs, H	MD, MPH, BS; Global Health, Community Health	P C	Community Health & Education
Nguyen, My	MEd, BA; Community, Health Education, Dental Hygiene	P C	Dental Hygiene, Community Health & Education
Park, David	MD, Pulmonary and Critical Care Medicine	P	Respiratory Care, Allied Health Core
Rao, Divya	DDS, BS; Dentistry, Dental Hygiene, Community Health	P	Dental Hygiene, Allied Health Core
Rockhill, Wendy	PhD, MS, BS; Biological Sciences, Human Physiology	P	Allied Health Core
Rutherford, Kay	MA, BA; Health Communications	F C	Community Health & Education
Sullivan, Debra	EdD, BA; Applied Behavioral Sciences, Research	F C*	Allied Health Core
Tonon, Marilyn	PhD, MPH, BS; Dental Hygiene, Global Health, Public Health, Research, Education	F C	Allied Health Core, Dental Hygiene, Community Health & Education
Tuble-Carbrera, Mila	MBA, BS; Dental Hygiene, Business Administration	P	Healthcare Services Management, Dental Hygiene
Williams, Bryan	DDS, BS; Dentistry, Dental Hygiene, Healthcare services management	P C	Dental Hygiene, Healthcare Services Management
Williams, Ellen	MS, BS; Dental Hygiene, Business, Healthcare services management	P C	Healthcare Services Management, Dental Hygiene
Yee, Gary	DDS, BS; Clinical Dentistry, Dental Hygiene, Community Health	P	Dental Hygiene

### FTE and Student Enrollment

The Bachelor of Applied Science in Allied Health Program begins implementation of the bachelor's program in 2015 with incoming groups of 20 and 25 students in dental hygiene and respiratory care respectively. The targeted class size accommodates the cohort model for clinical coursework and a teaching model ensuring effective interaction in group discussion for on-campus class sessions. It is consistent with the estimated availability of ongoing high-quality clinical and internship placements that allow meaningful application of concepts and theories gained as a result of the coursework. At the end of the first year of the program about 31 FTEs are expected. By year two, this expands to 119 FTEs.

During the second phase of the program, transfer students are added to the program from associate's degree programs and surrounding colleges. Tracks in community health and education and Healthcare Services Management begin by offering 2-3 upper division courses during 2016 and a full range of courses by 2018. Transfer students admitted in 2016-17 will be a mix of full-time and part-time students following a non-cohort model. The phased implementation plan allows the college to complete course development and adapt to the demands of students who come with unique advising and orientation needs. During year three, 159 FTEs are estimated growing to 175 FTEs by year five.

For purposes of enrollment management and conservative fiscal projections, an incoming class of 45 students per year entering the cohort model with an attrition rate of 5-10 percent for dental hygiene and 20 percent for respiratory care was assumed. For second phase enrollments including community health & education and healthcare services management, a total of 40 transfer students, a mix of part-time and full-time, are estimated each year graduating with an assumed attrition rate of 20 per cent. The program, however, is geared to minimize attrition through a selective admissions process, orientation, and ongoing retention services. FTE associated with the program are presented in Table 7.

### Criteria 3 Selective admissions process, if used for the program, consistent with an open door institution

#### Admission:

Students must be admitted by the college, meet prerequisite qualifications, and apply to a specific program track within the allied health baccalaureate program. Students complete a separate application for each track, indicating a cohort model or a part-time model. Approximately more than 100 students will be admitted annually by 2016. Application forms will be available on the college web site along with general information and detailed instructions.

#### Selection:

Selection into the program is merit based, with a strong academically based threshold for entrance into the admissions pool. The minimum for admission into the BAS in allied health sciences requires all applicants submit documentation of the following:

- An earned associate's or higher degree from a regionally accredited college or university

- Transcripts from previous colleges evaluated by Seattle Central
- Two non-family references
- Successful completion with a minimum 2.0 grade in all required courses including:
 

ENGL& 101 English Composition	(5 credits)
ENGL& 102 English Composition	(5 credits)
MATH& 107 or Math&146 or similar	(5 credits)
PSCH& 101 Psychology	(5 credits)
SOC& 101 or Anth&206 Social science course	(5 credits)
CHEM&122 Chemistry	(5 credits)
BIOL& 241 & 242 Human Anatomy and Physiology	(5-10 credits)
Additional required natural science courses depending on track	
Additional required general education requirements depending on track	
- A minimum cumulative grade point average of 2.5 in required courses
- A personal essay/statement that may include, but is not limited to, candidate's previous experience, personal goals, community service, and plan for career advancement
- Additional admissions criteria may include prerequisite coursework, successful completion of recognized professional/technical certificates and licenses, or documented experiences such as evidence of a minimum of the equivalent of 1000 hours of related full-time work experience.

The selection process is conducted by a committee that includes the BAS director and program coordinator. Additional members are selected by the program coordinators from faculty and qualified members of the community. Application packets are first reviewed to identify those who meet the minimum admissions criteria for placement into the admissions pool. When the number of academically qualified applicants exceeds space availability, the selection committee conducts an evaluation of individual applicants using specific criteria until the admissions pool matches the spaces available, and the most qualified enter the program. This process includes:

- A thorough review of each application, including transcripts, admissions forms, essays, resumes, and other available documentation.
- Quantified ratings of each applicant by each member of the selection committee based upon predetermined specific dimensions. These dimensions may include the number of required and recommended classes completed, relevant experience, interview, strength of essays or personal statements, and diversity of work experience. Prior to selection of an initial cohort, these selection dimensions are identified, definitions developed, a rating scale developed, and committee members trained to use the dimensions in a reliable manner.
- Review and discussion of the ratings of each applicant by the committee. When significant disagreement exists regarding ratings for an applicant, the committee will review the applicant's data and reach a consensus on the rating.
- Identification of the top candidates, based on the ratings, sufficient to fill available spaces. A waiting list of candidates is developed in case not all of those selected subsequently enroll in the program.
- Students who wish to take only one course per quarter or take longer than 3 years to complete the program may be allowed to register for individual courses if the student meets the admissions criteria and there is space available. This decision will be made on a space available basis by the program director.

**Explain efforts that will be used to assure that the program serves as diverse a population as possible.**

Recruitment methods for specific target groups are shown in Table 6. The following actions will assure as diverse a population as possible:

- Recruit people of color and other traditionally under-represented populations who are Seattle Central Community College graduates, and graduates from nearby community colleges.
- Work with diverse vocational programs, community organizations and foundations that dialogue with targeted groups.
- Publicize the program with hospitals, medical and dental facilities, industry and professional organizations to develop additional strategies to attract a diverse student body from workers in their employment ranks.
- Regularly assess recruitment/retention efforts with regard to under-represented populations, continually monitor the level of participation and report to the advisory committees of each program efforts to enhance diversity.
- Work with Seattle Central College Foundation to create scholarships to support diverse students in the BAS in Allied Health Sciences Program.

**Table 6: Recruitment of Targets for Application into the BAS Degree**

Targeted Group	Recruitment Methods
Currently enrolled students at SCCC and surrounding colleges	Faculty announcements, email, Facebook, in-person presentations at colleges, faculty advisors, posters, college and job fairs, college web-site, professional meetings, student events.
Graduates/previously enrolled students	Postcards, Facebook, alumni associations, email, web, local media, college fairs, job fairs, professional meetings
Seattle Central College select employees	Regular staff meetings, email, individual letters of invitation, college web-site
Allied health workers in the community	Announcements at professional meetings, through professional organizations and occupational publications, alumni organizations from college programs, college web-site, email, and direct mail

**Criteria 4 Appropriate student services plan**

As a community college, one of Seattle Central’s strengths is the variety of student-focused support services that help students achieve success in accomplishing their goals. Students in the BAS Program will be supported by the same high-quality student services that all students receive. The following services are those most used by baccalaureate students.

**Student advising, retention and success:**

Students who have not yet identified goals or have not yet completed the prerequisite requirements for entry into allied health are advised by professional advisors in the student services division. Some allied health programs are planned for cohorts based on a two year lock-step commitment such as dental hygiene and respiratory care. Transfer and part-time students wishing to enter require advising as to requirements and options. Students need an individualized schedule and plan when entering the program developed by the college student advisors and altered when necessary by the program coordinator.

**Support by the Allied Health Program:**

Student retention and student success are among the college’s top priorities. The director of the BAS in Allied Health Sciences Program and the coordinators of each track are available to students throughout the school year. After students have identified an allied health track, the BAS program director and coordinators of each track provide additional information and planning to help students complete application requirements for the BAS. Each track designates a specific person to contact with questions. When students begin a cohort track, the track orients students to the educational planning process, requirements for progress and degree completion. For students whose plans change after they have begun studies, individual assistance in planning and alterations to sequencing are made with an advisor supported by the BAS director and/or program faculty.

Non-cohort full-time and part-time transfer students must be introduced to student and academic support services early in their program. The allied health division plans a full-time advisor to track non-cohort students’ progress and performance and help transfer students meet or alter educational plans during the time they are in the program. Faculty and program coordinators participate in the development of remediation plans and personalized student success strategies as required. However, since faculty at Seattle Central does not assume advising responsibilities, a dedicated advisor is needed to address student advising needs. Faculty refer students who need assistance to this person for follow-up.

**Credentials evaluation:**

Credentials evaluators from Seattle Central have extensive experience evaluating transcripts from accredited institutions for compliance with admission requirements and degree requirements for graduation. Seattle Central evaluators determine general education, foundational sciences and associate degree credentials evaluation. Articulation agreements with local colleges facilitate local college transfer students. The BAS director and program coordinators will evaluate prior learning credit requests and course equivalency for technical and professional education and clinical skills when these are central to course outcomes being evaluated and are being evaluated within the context of baccalaureate allied health coursework.

**Library support:**

The library provides access to information and technology resources that support student learning and enhance teaching in an environment that fosters information literacy and academic excellence. It supports independent inquiry and lifelong learning by developing and maintaining collections and services in support of program curricula through information literacy instruction,

reference and services, course reserves, interlibrary loan, instructional equipment, student technology support, and copyright guidance.

Librarians maintain liaison relationships with program faculty to ensure that information literacy is infused appropriately into programs and to develop responsive collections that meet students' academic needs and interests. In collaboration with program faculty, librarians develop and deliver library instruction tailored to the needs of each program. Program faculty provide input on collection needs to support the curricula. Support for the Bachelor of Applied Science in Allied Health will be coordinated by the librarian currently responsible for library services to the college's allied health and nursing programs.

The library's collections consist of both print and online resources. The media and monograph print collections include 51,890 titles at Seattle Central and an additional district-wide collection of over 80,000 titles, including nearly 40,000 e-books. The library maintains a strong and highly relevant reference collection, with titles in print and electronic formats. Since 2008, library collections have been augmented to support the newly established bachelor's degree program in Applied Behavioral Science. The library currently subscribes to 29 online full-text periodical databases which provide access to thousands of academic titles in healthcare, allied health, management, and education.

Librarians provide reference service during the library's open hours, e-mail reference service, and 24/7 chat reference through QuestionPoint, a cooperative reference service staffed by academic librarians from colleges and universities around the world.

**Additional Services:**

- Center for Disability Services: Disability Services provides accommodations for students with documented disabilities. It provides course materials in alternate formats, reduced distraction-testing, adaptive technology aids, and assists faculty in providing appropriate accommodations.
- Financial aid: The Financial Aid Office prepares and disburses federal, state, and institutional aid for all students. Students can monitor the process of their applications online.
- Veteran's programs: The college assists all eligible veterans, reservists, dependents, and VA chapter 31 students. The BAS degree will be eligible for VA-approved student funds.
- Tutoring: On-campus tutoring services are available for mathematics, statistics, English, and accounting.
- Internet access: The college has computer labs, staffed with assistants, which are widely available Monday through Saturday. Students have e-mail accounts and access to the web via Wi-Fi.

**Criteria 5            Commitment to build and sustain a high quality program**

**Provide a financial plan for the first five years of program operation.**

The Bachelor of Applied Science in Allied Health Sciences program is a critical step that enables the college to support the community need for post-secondary education for allied health professions which currently have few pathways to higher education. This has become a high priority in the college's strategic plan. Table 7 shows the expected revenue to support the program. Additional details of the revenue are found in the appendix.

**Financial Plan**

**Types of funds to be used to support the program:**

Revenue for the program will come from tuition and fees and the state allocation for FTES. State budget constraints require the program to rely on tuition as the primary support mechanism. The majority of program costs will be covered by tuition. Costs for increased student services, library and eLearning, cashiering, curriculum development and technology will be borne by the college until enough revenues can be generated to begin supporting those services at the projected level of student enrollment. Tuition calculations are based on the currently published SBCTC rates. Because additional increases in tuition are expected to have a negative impact on enrollment, the college assumed no change in tuition during the first five years of the program.

**Table 7: Bachelor of Applied Science in Allied Health Sciences Program Revenue and Expenses**  
**Bachelor of Applied Science in Allied Health Sciences Program Revenue and Expenses**

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
	Implementation Year 0 (2013-14)	Implementation Year 1 (2014-15)	Year 2 (2015-16)	Year 3 (2016-17)	Year 4 (2017-18)	Year 5 (2018-19)
Student FTES	0.0	30.8	119.3	159.3	169.3	179.3

Administrative Salaries (+1FTE-- Director/Associate Dean)	0	65,000	65,000	75,000	75,000	75,000
Faculty Salaries	0	272,250	867,075	941,325	941,325	941,325
Clerical Salaries (+1 FTE--PA--Range 32 step G)	0	30,504	30,504	30,504	30,504	30,504
Other Salaries: Student Services (+.5 FTE)	0	18,000	18,000	18,000	18,000	18,000
Other Salaries: Financial Aid (+.5 FTE)	0	18,000	18,000	18,000	18,000	18,000
Other Salaries: Advisor (+1 FTE)	0	26,000	52,000	52,000	52,000	52,000
Other Salaries: Librarian (+.5 FTE)	0	26,000	26,000	26,000	26,000	26,000
Curriculum Development Stipends	10,000	10,000	10,000	10,000	10,000	10,000
Faculty Program Coordinators Stipends	0	0	13,068	13,860	13,860	13,860
Benefits (33%)	3,300	153,699	362,884	390,947	390,947	390,947
Goods and Services	2,000	12,000	24,000	24,000	24,000	24,000
Travel	1,500	5,000	10,000	10,000	10,000	10,000
Equipment	0	0	0	40,000	40,000	40,000
Marketing, Outreach and Recruitment	5,000	10,000	10,000	10,000	10,000	10,000
Library Materials	10,000	20,000	40,000	40,000	40,000	40,000
<b>Total Expenses</b>	<b>31,800</b>	<b>666,453</b>	<b>1,546,531</b>	<b>1,699,636</b>	<b>1,699,636</b>	<b>1,699,636</b>

**Bachelor of Applied Science in Allied Health Program Revenue**

	FY 14	FY 15	FY 16	FY 17	FY 18	FY 19
	Implementation (2013-14)	Year 1 (2014-15)	Year 2 (2015-16)	Year 3 (2016-17)	Year 4 (2017-18)	Year 5 (2018-19)
SBCTC FTE Revenue (\$3,664 per average FTE--existing allocation)	0	112,688	437,156	583,716	620,356	656,996
Tuition	0	212,796	897,588	1,202,965	1,278,082	1,353,199
Fees	0	18,894	61,926	67,446	68,826	70,206
<b>Total Revenues</b>	<b>0</b>	<b>344,379</b>	<b>1,396,670</b>	<b>1,854,127</b>	<b>1,967,264</b>	<b>2,080,401</b>

<b>Net</b>	<b>(31,800)</b>	<b>(322,074)</b>	<b>(149,860)</b>	<b>154,491</b>	<b>267,628</b>	<b>380,765</b>
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**Projected program expenses:**

The financial planning for the program includes consideration of the phase-in of the program over a period of three years or more. The start-up costs for the pre-enrollment and program development period begin in 2014. The program becomes sustainable in the 2015-16 fiscal year and increases net revenue each year after. The budget addresses the primary elements the college considers critical to developing and maintaining a quality program, excellence in instructional delivery, and effective student support and retention practices. Pre-program approval costs for the application process are not included and have been covered by the college. These costs include faculty, staff, and administration effort for parts A and B, and C and D which included program and course development and reviewers stipends among other costs.



A key principle in the effort to develop and sustain a high-quality program is reliance on infrastructure and models that currently exist on the campus for incorporation into the instructional delivery model. The college intends to deliver course content with a combination of seasoned, tenured faculty and adjunct faculty who are proven, experienced content experts. In order to produce a coordinated curriculum that allows students to transition through the course sequence with minimal adjustment, an initial budget for curriculum development, a learning management system adaptation and faculty training cost has been established. In addition, funding for a program director to begin in advance of the opening of classes has been identified, along with other required program development costs (library, marketing, travel, etc.). A 1.0 FTE advisor is critical to help students negotiate the program requirements and understand how to efficiently move to completion. Bachelor of Applied Science (BAS) in Allied Health Sciences students will require an additional .5 FTE in support in student services for registration, cashiering, transcript evaluation, and other services. These services are much more labor intensive for BAS students at this point. Financial aid processing is also very labor intensive and will require an additional .5 FTE staff member. The need for library services is significantly increased for BAS students and will require a .5 FTE librarian.

Instructional costs are calculated in the chart as a straight cost per hour of instruction. These could be taught by full-time or adjunct faculty. However, faculty to teach in the programs is an important consideration. Faculty recruitment will take place during the phase-in period when programs in respiratory care and dental hygiene begin baccalaureate courses. These are built on existing programs which have considerable numbers of qualified instructors with extensive experience in their respective fields. An additional four full-time faculty, one in each track, will be needed to meet anticipated demand and provide the means to sustain each track. Preference will be given to allied health faculty qualified to teach in more than one track, for example a professional dental hygienist with an MBA who can perform in both dental hygiene and healthcare services management, or a respiratory care practitioner who can teach both biostatistics and courses in the track.

Initially a program assistant and an exempt program director will provide the administrative support necessary for students and faculty to be successful in the program. The existing allied health staff and administration will provide additional support as needed. As program requirements increase based on increased numbers of students, the program director position will become an associate dean position.

A number of ongoing costs have been built into the budget including marketing, library, curriculum development, travel, equipment, as well as general goods and services, which includes program materials and costs for accreditation.

Seattle Central Community College will assist students in obtaining support to pay for the program through federal and state financial aid, student loans, and scholarship money.

**Appropriate facilities to be used:**

The new program will initially use the existing facilities at Seattle Central Community College and Seattle Vocational Institute. The dental hygiene track has existing dedicated labs and a clinic. The respiratory care track has existing dedicated labs. Although classroom availability will necessitate careful scheduling, all courses can be accommodated for all tracks. Future expansion will require additional classroom, lab and clinic space. However, the program is sustainable with the existing dedicated facilities. Long-term planning is currently looking at leasing another building or remodeling other college-owned property.

**Equipment, technology, and instructional resources needed for the program:**

The Bachelor of Applied Science in Allied Health Sciences program will require significant equipment, technology and instructional resources. Seattle Central Community College provides computer labs, technology, and instructional resources for all courses as needed. Each year programs go through a process for obtaining computing and non-computing equipment necessary for the individual program. The BAS in Allied Health Sciences program will use the provided equipment and participate in the college-supported processes for additional equipment. Given the high equipment requirements of the dental hygiene and respiratory care tracks, additional funds have been budgeted in. This will be an ongoing expense. The Healthcare Services Management and the Community Health and Education tracks will only require the equipment and technology supplied by the college.

**Criteria 6 Program specific accreditation**

The college seeks specialized program accreditation for professional tracks in dental hygiene and respiratory care. The new curriculum, policies, and procedures are expected to undergo rigorous scrutiny through outside evaluations accrediting bodies in addition to supervision and review provided by the SBCTC. The accrediting organizations have been kept abreast of developments and have recommended varying procedures for continued accreditation. There is no specific program accreditation for other occupational tracks.

The Respiratory Care program is accredited by the Commission on Accreditation for Respiratory Care (CoARC). CoARC is currently developing standards stratified by award to be implemented in 2015. Their recommended baccalaureate level standards have been integrated into the curriculum design of the program. The planned transition of the Respiratory Care Program includes submission of documentation required for a substantive program change for evaluation by CoARC. This documentation includes transition planning and curriculum changes. A self-study is not required for transition of the Respiratory Care program.

Dental Hygiene is accredited by the Council on Dental Accreditation, American Dental Association (CODA). A full accreditation site visit is planned for 2015 when CODA will formally visit and complete a review of every aspect of the proposed dental hygiene baccalaureate program of study. Full compliance with national accreditation standards is anticipated. Currently, dental hygiene faculty is completing a self-study based on the curriculum presented in this document. Documentation of courses are submitted to CODA during 2014. The planned transition maintains the existing accreditation award until such time as the baccalaureate degree begins.

Certification for students in the Community Health & Education track is optional and carried out on an individual basis. Some employers prefer health educators who are Certified Health Education Specialists (CHES). CHES is a certification offered by the National Commission for Health Education Credentialing, Inc. Certification is awarded after the candidate passes a test on the basic responsibilities of health educators. The exam is aimed at entry-level health educators who have completed a bachelor's degree or are within 3 months of completion.

### **Criteria 7 Pathway options beyond baccalaureate degree**

Regardless of the track, the bachelor's applied science opens a pathway into higher education for allied health workers. The bachelor's degree is a crucial link to higher education. Increasingly graduate degrees in public health, management, or education are needed to respond to the changing demographics of the US population, to meet the anticipated increase in demand for health services as a result of the Affordable Care Act, and to transfer the benefits of health related research into change in the health status of our population.

Discussions are underway with the University of Washington, for opportunities and articulations beyond the baccalaureate degree. The college is working with local and regional universities to seek a memo of understanding with their programs. Faculty and administration from the University of Washington, School of Public Health began working with the allied health division in 2012 to insure that the program is sufficiently robust to put Seattle Central BAS students on equal footing with UW students making application to graduate study programs in the School of Public Health. At the present time, a memo of understanding with the UW is being completed to streamline this admissions process.

There are additional Master's programs aligned with the BAS in allied health degree. Students who graduate in Community Health and Education are prepared for a master's degree in community health services or master's in community health education with no additional coursework. Students in the Healthcare Services Management track can consider a master's degree in public administration, healthcare administration, community health services, an MBA, a master's in leadership or human resources. Students in dental hygiene and respiratory care may consider master's degrees in their fields or in education, public health, health administration, epidemiology, global health, and community health.

### **Criteria 8 External expert evaluation of program**

#### **Thomas A. Barnes, EdD, RRT, FAARC**

Tom Barnes is a Professor Emeritus of Cardiopulmonary Sciences at Northeastern University and Director of the Master of Science in Respiratory Care Leadership Program. Dr. Barnes is an AARC Past-president, an AARC Life Member, and a Jimmy A. Young Medalist. He has published over a 100 research articles and abstracts, textbooks, book chapters, and multimedia programs. Dr. Barnes served as co-chair of the second and third AARC 2015 Conferences. He served as Chair of the 2015 Research Group for the third 2015 Conference. Tom has served for several years as the AARC's representative to the American Heart Association Emergency Cardiovascular Care Committee. He is a Product Design Consultant for Mercury Medical. Dr. Barnes is President of the Coalition for Baccalaureate and Graduate Respiratory Therapy Education (CoBGRTE). He was selected in 2010 by the AARC Education Section as Practitioner of the Year.

#### **JoAnn R. Gurenlian, RDH, PhD**

JoAnn R. Gurenlian is Professor and Graduate Program Director of the Department of Dental Hygiene, Division of Health Sciences, of Idaho State University. In addition, Dr. Gurenlian holds adjunct faculty positions in the Department of Dental Hygiene at Montgomery County Community College and Burlington County College. She has been a dental hygiene educator, researcher, author, and leader spanning a career over 35 years. Dr. Gurenlian served as a former faculty member and chairperson of the

Department of Dental Hygiene at Thomas Jefferson University in Philadelphia, Pennsylvania. She is the owner of Gurenlian & Associates providing speaking and consulting services to health care providers. Dr. Gurenlian is the President-Elect of the International Federation of Dental Hygienists and a Past President of the American Dental Hygienists' Association (ADHA).

**Summary of Seattle Central Community College's response and modification to the proposal based upon evaluator's recommendations.**

In general reviewers pointed to a strong curriculum, timeliness of development, needs, and implementation approaches within the proposed program. Specifically they noted strengths in the curriculum such as high professional standards, creation of articulation agreements, provision of multiple learning tools and techniques, alignment with national standards and a curriculum that responds to community needs for practitioners at the level of the applied baccalaureate degree. Reviewers stressed the need for curriculum that reflects emphasis on creating and providing experiences in new work force models, collaborative practices, health services research, public policy development, leadership, professional development and socialization, health literacy, and cultural competence within the context of advanced clinical courses. These concerns have been incorporated into the program's advanced training courses within each discipline.

Areas that reviewers suggested the College give further consideration is in the development process involved the future need for health care professionals who act on behalf of society to support change agent work and serve as client advocates. These concerns were addressed both through additional courses and the broadening of course objectives within individual course syllabi. For example, the BAS program added a pre-clinical course introducing all allied health students to cultural competence and advocacy at the start of the program. After the first quarter, which sets expectations for roles that can be systematically developed during clinical training; students have increased responsibilities for client advocacy and participation in legislative and professional activities. One reviewer suggested that the program incorporate a foreign language requirement, such as Spanish, to better serve the needs of the changing demographic structure of the US. This suggestion could not be accommodated unless the applied degree is converted to a BA or BS. An applied baccalaureate degree in science limits language requirements because the need for scientific foundational coursework and clinical courses is so great that program could not include such a requirement and still meet its most basic objectives within 180 credits of coursework. None-the-less, students are encouraged to appreciate the important role of bi-lingual providers. More specifically, Seattle Central Community College addresses the need to respond to the changing demography by focusing on recruitment of diverse students into its healthcare programs. In fact, in the current dental hygiene and respiratory care associate's level classes, more than half of the students are bi-lingual and speak languages that reflect local immigration patterns and needs. One reviewer pointed to curriculum changes that would simplify the program for students and outside entities as well. Minor adjustments to names and course sequence have been accommodated wherever possible.

The exceptional quality of our faculty and staff was noted by one reviewer. He went on to say that the quality faculty serve across disciplines and how this is an asset to students and the college. He also made a recommendation for additional faculty as the programs commence. The College has been able to accommodate for additional faculty in the budget in all degree tracks.

The timeliness of implementation was noted as well. One reviewer pointed out the relative lack of options for allied health practitioners in the State of Washington, the degree will fill that void. He went on to state that the degree development is consistent with discourse in the professions calling for higher trained entry level practitioners in order to meet emerging needs and roles of the new allied health provider.

Reviewers pointed to the excellent relationship between the program developers and the respective accreditation bodies who, to a great extent, supervise and maintain exceptionally high curriculum standards within a context of national standards and best practices.

**APPENDIX A: DENTAL HYGIENE TRACK**

**BACHELOR OF APPLIED SCIENCE IN ALLIED HEALTH SCIENCES SEATTLE CENTRAL COMMUNITY COLLEGE**  
***Dental Hygiene Track***

**TOTAL PROGRAM CREDITS REQUIRED FOR BAS: 195**

**Years 1 and 2: lower division prerequisites, allied health, and workforce courses**

**Years 3 and 4: upper division allied health core courses and workforce courses**

**PREREQUISITE COURSES**

		<b><u>CREDITS</u></b>
BIOL& 241	Human Anatomy & Physiology I	5
BIOL& 242	Human Anatomy & Physiology II	5

BIOL& 260	Microbiology	5
CHEM& 121	Intro to Chemistry	5
CHEM& 122	Intro to Organic Chemistry	5
MATH& 146	Statistics	5
PSYC& 100	General Psychology	5
ENGL& 101	Composition I	5
ENGL& 102	Composition II	5
SOC& 101	Intro to Sociology or ANTH& 206 Cult Anthropology	5
NTR 150	Human Nutrition	5
HUM 105	Intercultural Communication	5
	Humanities Elective	5
	<b>Total Prerequisite Credits:</b>	<b>65</b>

**DHY WORKFORCE LOWER DIVISION COURSES** **CREDITS**

AHE 128	Introduction to Healthcare Practice	4
AHE 129	Introduction to Healthcare Practice Lab	1
DHY 250	Oral Biology	2
DHY 251	Human Pathophysiology	3
DHY 261	Preventive Dentistry	2
DHY 252	Fundamentals of Dental Hygiene I	3
DHY 253	Clinical Dental Hygiene I	3
DHY 254	Health Promotion	2
DHY 255	Dental Radiology I	2
DHY 256	Dental Radiology I Lab	2
DHY 257	Head and Neck Anatomy	2
DHY 258	Dental Anatomy and Morphology	2
DHY 259	Dental Anatomy and Morphology Lab	1
DHY 260	Emergency Management	1
	<b>Total Workforce Credits:</b>	<b>30</b>

**DHY UPPER DIVISION AND BAS CORE COURSES** **CREDITS**

**Quarter 1**

DHY 300	Clinical Dental Hygiene II	4
DHY 303	Fundamentals of Dental Hygiene II	3
DHY 306	Restorative Practice and Materials I	2
DHY 307	Restorative Practice and Materials I Lab	1
DHY 323	Pharmacology	3
DHY 313	Periodontology I	3
DHY 314	Dental Radiology II	2
DHY 315	Dental Radiology II Lab/Clinic	1
		<b>19</b>

**Quarter 2**

AHE XXX	Research Methods	5
DHY 301	Clinical Dental Hygiene III	4
DHY 311	Pain Control Anesthesia	2
DHY 312	Pain Control Anesthesia Lab	2
DHY 304	Fundamentals of Dental Hygiene III	2
DHY 308	Restorative Practice and Materials II	2
DHY 309	Restorative Practice and Materials II Lab	1
DHY 318	Oral Pathology	2
		<b>20</b>

**Quarter 3**

DHY 302	Clinical Dental Hygiene IV	8
DHY 305	Fundamentals of Dental Hygiene IV	2
DHY 310	Advanced Restorative Practice I	2
DHY 391	Community Health I	1
		<b>13</b>

**Quarter 4**

DHY 400	Advanced Practicum in Dental Hygiene I	8
DHY 404	Principles of Dental Hygiene Practice I	3
DHY 409	Ethics and Jurisprudence	2
DHY 410	Advanced Restorative Practice II	2
DHY 413	Periodontology II	2
DHY 419	Community Health II	2
		<b>19</b>

**Quarter 5**

DHY 401	Advanced Practicum in Dental Hygiene II	8
DHY 405	Principles of Dental Hygiene Practice II	2
DHY 407	Strategies of Capstone Project	1
DHY 411	Advanced Restorative Practice III	2
DHY 414	Selective Populations	1
DHY 415	Selective Populations Lab	1
DHY 420	Community Health III	1
		<b>16</b>

**Quarter 6**

DHY 402	Advanced Practicum in Dental Hygiene III	8
DHY 406	Principles of Dental Hygiene Practice III	1
DHY 408	Capstone	1
DHY 412	Advanced Restorative Practice IV	2
DHY 416	Professional Issues	1
		<b>13</b>
	<b>Total Upper Division Credits</b>	<b>100</b>
	<b>Total Credits for Dental Hygiene Track BAS</b>	<b>195</b>

**Dental Hygiene Additional Course List:** 1) DHY 498 Independent Study variable 1 to 10 credits; and 2) DHY 499 Under graduate Research variable 1 to 20 credits; and 3) DHY 282,382-384,482-485 Applied Practicum.

**Dental Hygiene Program Goals**

1. Provide access to dental hygiene educational opportunities for underrepresented minorities, ethnic and cultural groups, immigrants and other non-traditional students of dental hygiene.
2. Graduate students from a program of dental hygiene which meets essential competencies and student outcomes outlined in the Seattle Central Dental Hygiene Student Handbook and in the American Dental Hygienists' Association Competencies.
3. Provide quality dental hygiene services to diverse populations in clinical and non-traditional settings.
4. Apply research and evidence-based decision-making to the selection of educational methodology, andragogy, scientific content, patient care treatment, and management.
5. Develop and implement a financial plan that sustains the financial health of the dental hygiene program and is aligned with the dental hygiene program's mission and strategic direction as well as the Seattle Central four core values.
6. Facilitate pathways with other educational institutions to provide additional academic advancement and higher education.

**APPENDIX B: RESPIRATORY CARE TRACK**

<b>BACHELOR OF APPLIED SCIENCE IN ALLIED HEALTH SCIENCES SEATTLE CENTRAL COMMUNITY COLLEGE</b> <b><i>Respiratory Care Track</i></b>
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**TOTAL PROGRAM CREDITS REQUIRED BAS: 180**

**Years 1 and 2: lower division prerequisites, allied health, and workforce courses**

**Years 3 and 4: upper division allied health core courses and workforce courses**

**PREREQUISITE COURSES**

	<b><u>CREDITS</u></b>	
BIOL& 241	Human Anatomy & Physiology I	5
BIOL& 242	Human Anatomy & Physiology II	5
BIOL&260	Microbiology	5
CHEM& 121	Introduction to Chemistry	5
CHEM& 122	Introduction to Organic Chemistry	5
MATH& 146	Inferential Statistics	5

ENG&101	English Composition	5
ENG&102	English Composition	5
PSY 100	General Psychology <b>OR</b>	
PSY 200	Lifespan Psychology	5
HUM 105	Intercultural Communication	5
SOC& 101	Introduction to Sociology	5
ELECTIVE	Humanities elective	5
	<b>Total Prerequisite Credits:</b>	<b>60</b>

<b><u>RCP WORKFORCE LOWER DIVISION COURSES</u></b>		<b><u>CREDITS</u></b>
AHE 110	Introduction to Respiratory Care	2
BUS 100	Fundamentals of Supervision <b>OR</b>	
BUS 103	Personnel/Human Relations	3
AHE 168	Medical Terminology	5
RCP 201	Respiratory Care Orientation	1
AHE 128	Introduction to healthcare practice	4
AHE 129	Introduction to healthcare practicum	1
RCP 213	Respiratory Care Clinical Assessment	2
RCP 215	Basic Pharmacology	2
RCP 218	Basic Therapeutic Approaches	4
RCP 219	Basic Therapeutic Approaches Lab	1
RCP 217	Cardiopulmonary Anatomy & Physiology	5
	<b>Total:</b>	<b>30</b>

<b><u>RCP UPPER DIVISION AND BAS CORE COURSES</u></b>		<b><u>CREDITS</u></b>
<b>Quarter 1</b>		
RCP 320	Acute Care Clinical I	4
RCP 333	Pathophysiology for Respiratory Care	2
RCP 328	Advanced Therapeutic Approaches	4
RCP 329	Advanced Therapeutic Approaches Lab	1
AHE 330	Information Literacy	5
	<b>Total:</b>	<b>16</b>

<b>Quarter 2</b>		
RCP 330	Acute Care Clinical II	5
RCP 338	Respiratory Care Fundamentals III	4
RCP 339	Equipment and Techniques III	1
AHS 320	Research Methodology and Quantitative principals	5
	<b>Total:</b>	<b>15</b>

<b>Quarter 3</b>		
RCP 340	Adult Critical Care Clinical I	4
RCP 347	Cardiology	2
RCP 348	Advanced Mechanical Ventilation	2
RCP 349	Advanced Mechanical Ventilation Lab	1
CHE XXX	Principles of Higher Education and Professional Training	5
	<b>Total:</b>	<b>14</b>

<b>Quarter 4</b>		
RCP 450	Adult Critical Care Clinical II	6
RCP 451	Neonatal/Pediatric Pathophysiology	2
RCP 455	Advanced Pharmacology	2
RCP 458	Fundamentals of Neonatal/Pediatric Respiratory Care	4
RCP 459	Fundamentals of Neonatal/Pediatric Respiratory Care Lab	1
	<b>Total:</b>	<b>15</b>

**Quarter 5**

RCP 460	Neonatal/Pediatric Clinical <b>Or</b>	6
RCP 470	Adult Critical Care Clinical III	6
RCP 463	Advanced Pathophysiology	2
RCP 464	Pulmonary Rehabilitation and Home Care	2
RCP 468	Advanced Cardiopulmonary Diagnostics	3
RCP 469	Advanced Cardiopulmonary Diagnostics Lab	1
RCP 457	Advanced Cardiopulmonary Physiology	2
	<b>Total:</b>	<b>16</b>

#### Quarter 6

RCP 460	Neonatal/Pediatric Clinical <b>Or</b>	6
RCP 470	Adult Critical Care Clinical III	6
RCP 462	Advanced Practitioner Exam Review	1
RCP 479	Senior Capstone Project in Respiratory Care	4
RCP 476	Advanced Clinical Simulation in Respiratory Care	3
	<b>Total:</b>	<b>14</b>

**TOTAL PROGRAM CREDITS: 180**

#### Respiratory Care Program Goals

1. To prepare graduates with demonstrated competence in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory care practice as performed by registered respiratory therapists (RRTs).
2. To prepare leaders for the field of respiratory care with demonstrated competence in management, education, research and advanced clinical practice (which may include an area of clinical specialization).

#### Respiratory Care Learning Outcomes

BAS graduates of the Respiratory Care Program will:

1. Perform quality respiratory care using affective, psychomotor and cognitive skills.
2. Provide a safe environment while delivering all aspects of respiratory care.
3. Incorporate knowledge of legal and ethical issues into respiratory care practice.
4. Communicate effectively with clients, families, significant others and all members of the healthcare team.
5. Promote cardiopulmonary health and wellness.
6. Participate in activities that support the profession of respiratory care.
7. Integrate evidence based practice into respiratory care.
8. Incorporate an understanding of health, illness, and cultural diversity into all aspects of respiratory care.
9. Utilize leadership principals to guide teams toward achievement of a common goal.
10. Teach individuals and groups to achieve and maintain an optimum level of wellness.
11. Synthesize new concepts by integrating prior learning, life experience and generalizing theoretical knowledge.
12. Use the principals of life-long learning to identify and address one's own limitations of knowledge, and skill.

### APPENDIX C: HEALTHCARE SERVICES MANAGEMENT TRACK

**BACHELOR OF APPLIED SCIENCE IN ALLIED HEALTH SCIENCES SEATTLE CENTRAL COMMUNITY COLLEGE**

***Healthcare Services Management Track***

Revised 05/14/13

**TOTAL PROGRAM CREDITS REQUIRED BAS: 185**

**Years 1 and 2: lower division prerequisites, allied health, and workforce courses**

**Years 3 and 4: upper division allied health core courses and workforce courses**

#### **PREREQUISITE COURSES**

		<b><u>CREDITS</u></b>
BIOL& 241	Human Anatomy & Physiology I	5
BIOL& 242	Human Anatomy & Physiology II	5
BIOL&260	Microbiology	5
CHEM& 121	Introduction to Chemistry	5
CHEM& 122	Introduction to Organic Chemistry	5
MATH& 146	Statistics	5
ENG&101	English Composition	5
ENG&102	English Composition	5

PHYS&121	General Physics	5
PSYC& 100	General Psychology or	
PSYC 200	Lifespan Psychology	5
HUM 105	Intercultural Communication	5
SOC& 101	Introduction to Sociology	5
ELECTIVE	Humanities elective	5
	Additional as approved from AAS degree	
	<b>Total Prerequisite Credits:</b>	<b>60</b>

**HEALTHCARE SERVICES MANAGEMENT LOWER DIVISION COURSES**

**CREDITS**

AHE 128/129	Introduction to Healthcare Practice and Practicum	5
ACCT&	Principles of Accounting I, II, III	5 each
BUS& 101	Introduction to Business	5
BUS 116	Business Math/Spreadsheets	5
BUS 185	Small Business Management	5
BUS 103	Human Resources Management	3
BUS 184	Database Applications	5
BUS 100	Fundamentals of Supervision	3
BUS 131-132	Integrated Communications I, II	5 each
BUS 170-172	Information Technology I, II, III	4 each
BUS 140	Customer Relations	5
BUS 201	Business and Economic Statistics 5	
	Workforce courses from AAS	variable
	<b>Total Required:</b>	<b>30</b>

**HEALTHCARE SERVICES MANAGEMENT UPPER DIVISION COURSES**

**CREDITS**

<b>Quarter 1</b>	<b>Fall</b>	
HSM XXX	Introduction to Healthcare Services Management	5
AHS XXX	Introduction to Healthcare Delivery	5
AHS XXX	Biostatistics, Inferential Statistics <b>OR</b> BUS 201	5
		<b>15</b>
<b>Quarter 2</b>	<b>Winter</b>	
HSM XXX	Principles of Healthcare Services Management	5
AHS XXX	Information Literacy	5
AHS XXX	Research Methods	5
		<b>15</b>
<b>Quarter 3</b>	<b>Spring</b>	
HSM XXX	Human Resources	5
HSM XXX	Financial Management in Healthcare	5
HSM XXX	Law and Ethics in Health Administration	5
		<b>15</b>
<b>Quarter 4</b>	<b>Fall</b>	
CHE/HSM XXX	Leadership and Team Building	5
HSM XXX	Health Informatics	5
	Elective	5
		<b>15</b>
<b>Quarter 5</b>	<b>Winter</b>	
HSM XXX	Field Training Applied Practicum	5-15
HSM XXX	Strategic Planning and Marketing	5
	Elective	5
		<b>15</b>
<b>Quarter 6</b>	<b>Spring</b>	
HSM XXX	Field Training Applied Practicum	5-15
HSM XXX	Healthcare Services Management Capstone	3-5
	Elective	5
		<b>15</b>
	<b>TOTAL PROGRAM CREDITS BAS</b>	<b>180</b>



**APPENDIX D: COMMUNITY HEALTH & EDUCATION TRACK**

<b>BACHELOR OF APPLIED SCIENCE IN ALLIED HEALTH SCIENCES SEATTLE CENTRAL COMMUNITY COLLEGE</b> <b><i>Community Health &amp; Education Track</i></b>
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**TOTAL PROGRAM CREDITS REQUIRED BAS: 185**

**Years 1 and 2: lower division prerequisites, allied health, and workforce courses**

**Years 3 and 4: upper division allied health core courses and workforce courses**

<u>PREREQUISITE COURSES</u>	<u>CREDITS</u>
BIOL& 241 Human Anatomy & Physiology I	5
BIOL& 242 Human Anatomy & Physiology II	5
BIOL&260 Microbiology	5
CHEM& 121 Introduction to Chemistry	5
CHEM& 122 Introduction to Organic Chemistry	5
MATH& 146 Inferential Statistics	5
ENG&101 English Composition	5
ENG&102 English Composition	5
PHYS&121 General Physics	5
PSY 100 General Psychology or	0
PSY 200 Lifespan Psychology	5
HUM 105 Intercultural Communication	5
SOC& 101 Introduction to Sociology	5
ELECTIVE Humanities elective	5
Additional as approved from AAS degree	
<b>Total Prerequisite Credits:</b>	<b>60</b>

<u>COMMUNITY HEALTH &amp; EDUCATION LOWER DIVISION COURSES</u>	<u>CREDITS</u>
ANTH 275 Medical Anthropology	5
ANTH 130 World Cultures	3-5
ANTH 135 Cultural Ecology	3-5
GEOG &200 Human Geography	5
WMN 205 Women in the Global Context	5
AME 160 Special topics in multicultural studies (social justice)	2-5
Workforce courses from AAS	variable
<b>Total Required:</b>	<b>30</b>

<u>COMMUNITY HEALTH &amp; EDUCATION UPPER DIVISION COURSES</u>	<u>CREDITS</u>	
<b>Quarter 1</b>	<b>Fall</b>	
CHE XXX Introduction to Community Health & Education		5
CHE XXX Health Behavioral Change Theoretical Foundations		5
AHS XXX Biostatistics, Inferential Statistics or BUS 201		5
		<b>15</b>
<b>Quarter 2</b>	<b>Winter</b>	
CHE XXX Social Determinants of Disease		5
CHE XXX Provider-Patient Communication		5
AHS XXX Research Methods		5
		<b>15</b>
<b>Quarter 3</b>	<b>Spring</b>	
CHE XXX Healthcare Disparities		5
AHS XXX Information Literacy		5
CHE XXX Community Education Program Planning and Evaluation		5
		<b>15</b>
<b>Quarter 4</b>	<b>Fall</b>	
CHE/HSM XXX Leadership and Team Building		5
CHE XXX Principles of Higher Education and Professional Training		5

	Elective	5
		<b>15</b>
<b>Quarter 5</b>	<b>Winter</b>	
CHE XXX	Field Training Applied Practicum	5-15
CHE XXX	Elective	5
	Elective	5
		<b>15</b>
<b>Quarter 6</b>	<b>Spring</b>	
HSM XXX	Field Training Applied Practicum	5-15
CHE XXX	Community Health & Education Capstone	3-5
	Elective	5
		<b>15</b>
	<b>TOTAL PROGRAM CREDITS BAS</b>	<b>180</b>

**APPENDIX E: Review of the Bachelor of Applied Sciences in Allied Health Sciences Program Seattle Central Community College**

**Background of the Evaluator**

JoAnn R. Gurenlian, RDH, PhD, is Professor and Graduate Program Director of the Department of Dental Hygiene, Division of Health Sciences, of Idaho State University. In addition, Dr. Gurenlian holds adjunct faculty positions in the Department of Dental Hygiene at Montgomery County Community College and Burlington County College. She has been a dental hygiene educator, researcher, author, and leader spanning a career over 35 years. Dr. Gurenlian served as a former faculty member and chairperson of the Department of Dental Hygiene at Thomas Jefferson University in Philadelphia, Pennsylvania. She is the owner of Gurenlian & Associates providing speaking and consulting services to health care providers. Dr. Gurenlian is the President-Elect of the International Federation of Dental Hygienists and a Past President of the American Dental Hygienists' Association (ADHA).

In the course of her career, Dr. Gurenlian has contributed to the advancement of the profession through developing undergraduate and graduate level dental hygiene courses, administering programs, serving as an outside consultant for curriculum development and evaluation to community college and university based dental hygiene programs, mentor to new dental hygiene program faculty, international speaker, and author of over 160 published papers.

Dr. Gurenlian holds an Associate of Applied Science and Bachelor Degree in Dental Hygiene from Fairleigh Dickinson University, a Master of Science in Dental Hygiene degree from Columbia University, and a Doctorate of Philosophy specializing in Educational Leadership from the University of Pennsylvania.

Active in health care, Dr. Gurenlian has served as the Vice Chair and then Chair of the Pharmacy, Podiatry, Optometry, and Dental Professionals (PPOD) Work Group of the National Diabetes Education Program (NDEP), and chair of the committee examining the future of dental hygiene for the ADHA. She has been a member of the Council on Education and Research, and later, the Council on Education for the ADHA.

Dr. Gurenlian is a recognized international speaker addressing such topics as oral pathology, oral medicine, diabetes mellitus, women's health, and leadership and professional development. She has served as a clinical practitioner in general, pediatric, periodontal, and orthodontic practice settings, and currently works part-time in a medical practice.

**General Comments**

The Bachelor of Applied Science in Allied Health Sciences Program is slated to begin in 2015 at the Seattle Central Community College. The report describing this program focused on 10 criteria including curriculum rigor, learning objectives and outcomes, degree requirements, implementation plan, faculty, student enrollment, admissions, staffing needs, sustainability, accreditation, and finances. Four tracks have been proposed including: Dental Hygiene, Respiratory Care, Healthcare Service Management, and Community Health & Education.

The proposal places emphasis on hallmarks of health care; increasing access to care by providing well-educated health care providers, and focusing on community settings that will allow for much needed health care homes for the public in the areas surrounding and within Seattle. Transcending the current health care delivery system that has largely failed the public, this proposal provides for a much needed reframing of education and workforce models. It provides a systematic approach to fulfilling changes that are needed to improve the health of the public and job opportunities for these health care providers. Further analysis of the proposal appears below.

## **Curriculum Component**

The curriculum outlined specifically for the dental hygiene department is abundant in clinical skills; however lacks some of the features recommended in the report “Dental Hygiene: Focus on Advancing the Profession” produced by the American Dental Hygienists’ Association and available at [www.adha.org](http://www.adha.org). Within this report, it was recommended that the dental hygiene curriculum be redesigned based on the increasingly complex oral health needs of the public. To that end, new entry level models that address the following topics were proposed.

- Oral health needs
- Training programs in community-based, underserved areas
- Community health and disease management
- Cultural competence
- Needs of special groups
- Health services research
- Public policy development
- Evidence based research methodology and practice
- Collaborative practice models

Although some of the topics above are addressed, the curriculum does not capture and reflect emphasis on creating and providing experiences in new work force models, collaborative practices, health services research, public policy development, leadership, professional development and socialization, health literacy, and cultural competence. There does not appear to be a prerequisite for a language requirement; yet, within a few decades, the majority of residents will be Hispanic/Latino. Students need to be able to adequately communicate with their patients/clients, and efforts should be made to promote language development in health care. Language development and communication crosses all disciplines represented in this bachelor of applied sciences program.

It is recommended that some of the advanced clinical courses be focused on collaborative practice models and exploration of evidence based practice. Further, it is recommended that students be provided specific experiences gaining cultural competence in community settings. The proposal does indicate that capstone experiences will be required. This places emphasis on greater development of planning, implementation and evaluation skills, a unique benefit for students obtaining a bachelor degree.

## **Appropriateness of Plan for Implementation**

The proposal indicates that phases of implementation will begin in 2014 and continue through 2016. Consideration has been given to marketing, recruitment of students, application and student selection processes, placement of working adults, establishment of articulation agreements, and development of student services to support the advising, retention, and success of students in these allied health programs. Necessary plans for accreditation have begun and will continue through the phases of the implementation initiatives ensuring that students enrolled in these programs will receive an appropriate education meeting established standards. The financial projections for each phase of the plan appear appropriate and realistic.

## **Strengths and Areas for Improvement**

There are multiple strengths of the Bachelor of Applied Science in Allied Health Sciences Program. First, the excellent faculty available to teach in the four programs should be recognized. Their expertise will provide for a rich educational experience. SCCC has made efforts to recruit faculty who are not only accomplished in their field, but accomplished in education. These faculty will serve as champions for the advancement of the students in terms of learning and workplace experiences.

Another strength of this new program relates to the initiatives to achieve and/or maintain accreditation status from specialty organizations. There appears to be substantive effort made to uphold appropriate professional standards for educating dental hygienists and respiratory care providers. Building in approvals from accrediting bodies into the implementation plan shows both foresight and leadership.

Creating and enhancing articulation agreements to foster development of a student body that is rewarding to the institution represents a significant strength of the program. Students who wish to further their education need opportunities to do so without losing the value of already earned college credits. As well, students need confidence in the pathways provided that will lead them to be successful in obtaining a bachelor degree in a timely manner. Articulation agreements are an efficient and cost-saving means of maximizing student educational experiences bridging students from one institution to another.

Further, providing hybrid learning allows students to experience multiple learning tools and techniques that will enhance their educational experience. The literature supports hybrid learning among millennial students and other generational students returning to the workforce and college. Hybrid learning provides for enhanced use of technologies to supplement and support educational experiences.

Finally, with respect to strengths, the College has undergone investigation into the need for expansion to an applied baccalaureate degree program. The report provided demonstrates a demand from employers and the community for individuals educated at the baccalaureate level. As well, labor market data supports the need for a more skilled workforce.

In addition to the above-mentioned strengths, there is an area that requires further consideration. In relation to the dental hygiene program in particular, comments have been made already about the curriculum. Nevertheless, it is important to note that the opportunity exists to create a health care provider that is capable of serving as an advocate and change agent improving the health of the public. This type of professional is not reflected in the curriculum and represents a gap in the approach that must be addressed given the federal and state mandates that exist. Understanding that the oral health needs of the public are not being met both in Seattle, the state of Washington, and the nation, it is critical that future education programs provide learning experiences that support a health care professional beyond a skilled technician.

## **APPENDIX F: Review of the Bachelor of Applied Sciences in Allied Health Sciences Program Seattle Central Community College**

### **Background of the Evaluator**

Tom Barnes is a Professor Emeritus of Cardiopulmonary Sciences at Northeastern University and Director of the Master of Science in Respiratory Care Leadership Program in the College of Professional Sciences. The Northeastern MSRC degree program is the largest in the USA with 40 students currently enrolled.

Dr. Barnes is an American Association for Respiratory Care (AARC) Past-president, an AARC Life Member, and a Jimmy A. Young Medalist. He has published over 100 research articles and abstracts, textbooks, book chapters, and multimedia programs. Dr. Barnes served as co-chair of the second and third AARC 2015 Conferences. He served as Chair of the 2015 Research Group for the third 2015 Conference. Tom has served for several years as the AARC's representative to the American Heart Association Emergency Cardiovascular Care Committee. He is a Product Design Consultant for Mercury Medical.

Dr. Barnes is President of the Coalition for Baccalaureate and Graduate Respiratory Therapy Education (CoBGRTE). He was selected in 2010 by the AARC Education Section as Practitioner of the Year.

### **General Comments**

The timing for bringing a baccalaureate degree program suited for respiratory therapists to the Washington State is optimal. New responsibilities for respiratory therapist have been identified by the three AARC 2015 and Beyond conferences.<sup>1-3</sup> The first 2015 conference described the need for evidence-based respiratory care practice in the future.

*"The science of respiratory care will continue to evolve and increase in complexity. Clinical decisions will become increasingly data-driven. Respiratory care will be an important part of care in all venues. Scientifically supported algorithms (protocols) will be the most common way to deliver respiratory care. This will stimulate an even greater need for RTs to be involved in research and will require the average RT to be adept at understanding the practical ramifications of published research."<sup>1</sup>*

Research conducted before the third 2015 and Beyond conference identified differences in the competencies taught by associate and baccalaureate degree respiratory therapy programs. A survey of 348 accredited RT programs in 2010 with a 80% response rate showed that only 42% of associate degree programs taught competencies on how to critique published research.<sup>4</sup> This competency was taught by 80% of the baccalaureate programs surveyed. The major findings of the national survey are:<sup>4</sup>

- Six of the 8 major competency areas identified by the second 2015 and Beyond conference have several competencies that are taught in more of the baccalaureate degree programs than in the associate-degree programs.
- One quarter of the respondents have the capability to directly award a baccalaureate degree.
- Two thirds of the respondents favor requiring the RRT credential to practice in 2015 and beyond.
- There was broad support for future respiratory therapists obtaining a baccalaureate or graduate degree after they have begun practice.
- One-hundred respondents favored requiring a baccalaureate or graduate degree to qualify for a license to deliver respiratory care.

The third 2015 and Beyond conference held in July of 2010 reached majority agreement on the need for a baccalaureate degree as the minimum entry education level and the RRT as the credential for beginning respiratory care practice. The third 2015 and Beyond conference concluded.<sup>3</sup>

*“The RTs of today are expected to perform therapeutic techniques, deliver medications, and operate medical devices that were not even available 20 years ago to evaluate and treat patients with increasingly complex cardiopulmonary disorders. The RT of today is expected to assess and quantify the patient’s cardiopulmonary status, to provide appropriate respiratory care by applying protocols, and to evaluate the medical and cost effectiveness of the care that RTs deliver. The expectation is that in 2015 and beyond, in addition to an active role as a bedside care provider, all RTs will be consultants on how respiratory care should be provided. On patient rounds, RTs are expected to contribute to the discussion of goals and direction of therapy and to provide evidence supporting various approaches to respiratory care used in the intensive care unit. Specifically, RTs should possess the ability to discuss and recommend care for patients presenting with diseases that affect the respiratory system. RTs must achieve higher levels of education and training to respond to these increasing future demands projected by the 2015 and Beyond conferences.”*

### **Curriculum Component**

The curriculum outlined for the respiratory therapy department covers what is needed in a baccalaureate degree program. The curriculum would be stronger if the several one credit pathophysiology and pharmacology courses were offered as four credit hour courses. If these courses need to be offered more than once then a two course sequence in both subjects should be offered – one in the junior year and second in the senior year.

The use of course names such as Respiratory Fundamentals I, II, III, IV and V should be changed to indicate what the major content area is taught in each course. Equipment and Techniques I, II, III, IV courses should be renamed to indicate the major type(s) of equipment taught in each course, e.g., Adult Mechanical Ventilator Lab, Neonatal and Pediatrics Equipment Lab.

The Clinical Practice courses should be renamed to indicate the type of clinical experience that will occur, e.g., Adult Critical Care Clinical Practice, Neonatal and Pediatric Clinical Practice. Adult Critical Care (RCP 347), Respiratory Care of Infants and Children (RCP 459) and Advanced Patient Assessment (RCP 476) should be a 4 credit hour courses. RCP 459 should be renamed to Neonatal and Pediatric Respiratory Care.

RCP 462 Advanced Practitioner Exam Review should be taught in quarter 6 since it is likely that NBRC will only issue the ASRT Equivalency Certificate to students enrolled in the last quarter of the program. The Certificate would allow the senior student to take CRT and RRT exams before graduation (CoARC Policy 13).

### **Appropriateness of Plan for Implementation**

Implementing the plan in 2014-2016 will assure education for graduate respiratory therapists that have been educated to a competency level described in the second 2015 and Beyond conference,<sup>2</sup> and congruent with the results of the national survey of accredited program directors conducted in 2010.<sup>4</sup> The Board of Directors of the Respiratory Care Society of Washington published a white paper in February of 2012 identifying the need for baccalaureate education for respiratory therapists. Below is an excerpt from their letter:

*“To address the expanding scope of practice in Washington State most programs have had to shift general education requirements to prerequisites making them a three rather than two year curriculum. This has left students with a high level of academic credit which will not transfer to a four year institution. Currently, there are no local options for RCP’s in the state to complete their bachelor’s degree in Respiratory Care. This leaves little option for many of the approximately 2200 RCP’s in the state. Degree seekers are forced to go out of state at great expense to one of the online degree completion programs available. This has resulted in a sparse cohort of RCPs with a bachelor’s degree. Without a local option, we will not be able to serve the future needs of respiratory patients in our communities.”*

The Bachelor of Applied Science in Allied Health Sciences Program with a track for respiratory therapists that is planned by Seattle Central Community College is timely, well planned, and needed by respiratory therapists in the Greater Seattle area and throughout the State of Washington. The implementation plan has identified a market for the program and has planned for articulation agreements with associate degree respiratory therapy programs throughout the state. The proposal has planned well for integrating transfer students into the program of study.

### **Strengths and Areas for Improvement**

There many strengths of the Bachelor of Applied Science in Allied Health Sciences Program. It calls upon faculty from four different programs to work together to add many course options to enrolled students. The faculty has solid professional experience in each of the four concentrations that will be offered. The current Respiratory Therapist Program Director, Fred Goglia, MEd, RRT is very active with the Washington Society for Respiratory Care and has a relationship with the other RT program directors in the state that will help with the recruitment of transfer students. The two full-time RT faculty members will allow the Respiratory Therapist track to begin without additional recruitment until 2015. When the program is fully implemented a third faculty member will be needed.

All faculty members will need to hold a masters' degree at minimum and the program director should begin work on a doctorate in higher education as soon as possible. Adjunct faculty will be needed to teach clinical practice courses, internships, and for specialty courses such as Neonatology and Pediatrics, Advanced Critical Care, and Sleep Disorders Diagnosis and Treatment.

Physical resources on campus such as the respiratory therapy laboratory will provide a core of equipment that can without having to build a teaching laboratory from scratch. The infrastructure to offer a baccalaureate degree such as admissions office, student counseling, and administrative support are all in place. The current SCCC Respiratory Therapist Program is accredited by the Commission on Respiratory Care Education, and the faculty members have kept the accrediting agency apprised on the plans to offer a baccalaureate degree to respiratory therapy students.

Areas for improvement include revising the curriculum as suggested above to make it clearer to students the course content offered by the in the upper division respiratory care program of study. A clinical simulation laboratory should be established to develop clinical problem solving ability and to reinforce national best practice guidelines. Faculty need to establish an on campus student journal club to keep students apprised of the latest information on evidence-based practice. The Journal Club can also serve as a strategy to teach students to critically review research articles in peer-reviewed science journals. It will be important to motivate students to conduct respiratory care research in their senior year or shortly after graduation. Students should be encouraged to prepare research abstracts for presentation on campus and to submit abstracts to the American Association for Respiratory Care Open Forum at the annual Respiratory Congress.

### References

1. Kacmarek RM, Durbin CG, Barnes TA, Kageler WV, Walton JR, O'Neil EH. Creating a vision for respiratory care in 2015 and beyond. *Respir Care* 2009;54(3):375-389.
2. Barnes TA, Gale DD, Kacmarek RM, Kageler WV. Competencies needed by graduate respiratory therapists in 2015 and beyond. *Respir Care* 2010;55(5):601-616.
3. Barnes TA, Kacmarek RM, Durbin CG. Transitioning the Respiratory Therapy Workforce for 2015 and Beyond. *Respir Care* 2011;56(5):681-690.
4. Barnes TA, Kacmarek RM, Durbin CG. Survey of Respiratory Therapy Educational Program Directors in the United States. *Respir Care* 2011(4): 1906-1915.