

BOARD OF HIGHER EDUCATION
REQUEST FOR COMMITTEE AND BOARD ACTION

COMMITTEE: Academic Affairs

NO: AAC 16-23

COMMITTEE DATE: April 26, 2016

BOARD DATE: May 3, 2016

APPLICATION OF NORTHERN ESSEX COMMUNITY COLLEGE TO AWARD THE ASSOCIATE IN SCIENCE IN PUBLIC HEALTH

MOVED: The Board of Higher Education hereby approves the application of **Northern Essex Community College** to award the **Associate in Science in Public Health**.

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

Authority: Massachusetts General Laws Chapter 15A, Section 9(b)

Contact: Winifred M. Hagan, Ed.D.
Associate Commissioner for Academic Affairs and Student Success

BOARD OF HIGHER EDUCATION

May 2016

Northern Essex Community College Associate in Science in Public Health

INTENT AND MISSION

The proposed Associate in Science in Public Health (AS/PH) program is expected to contribute to the Northern Essex Community College (NECC) strategic mission to be a contributing member of the community, particularly as it relates to the workforce development of health professionals. The intent of the proposed AS/PH program is to graduate competent entry level public health generalists. It is planned that graduates will be prepared to work in a variety of health agencies including ambulatory, community based settings, physician offices and other public health organizations.

Upon completion of the proposed Public Health program, it is intended that graduates will be able to: participate in the implementation of interventions that affect health issues including structure and function of the healthcare delivery setting and public policies; participate in an interdisciplinary/integrative team to address a selected public health issue; describe public health systems as they pertain to organization, financing and delivery of services; practice and comply with the Massachusetts Code of Ethics for Community Health Workers; and provide a detailed community assessment of needs and develop a plan to educate a selected population on health risk modification.

The proposed program has obtained all necessary governance approvals on campus and was approved by the Northern Essex Community College Board of Trustees on October 7, 2015. The required letter of intent was circulated on November 2, 2015. No comments were received.

NEED AND DEMAND

National and State Labor Market Outlook

According to the Massachusetts Labor Market and Economic Review (2014), the area of health services is a leading job creating industry. In 2014, there was a 2.9% growth rate (16,500 jobs) for health care and social assistance and this represented the greatest increase in service jobs in the state. Education and Health Services was the largest employment industry and represented 744,200 jobs (December 2014) in the Commonwealth of Massachusetts.

Job postings indicate the need for applicants to be bilingual, bicultural and to understand the community and populations they serve. The positions reflect The American Public Health Association's definition of a Community Health Worker (CHW) as "a frontline public health worker who is a trusted member of, and/or has an unusually close understanding of, the community served...CHWs are also known as: community health advocates, neighborhood workers; lay health advisers; outreach workers; patient navigators; peer health educators; camp aides; and community health representatives (CHRs)." NECC is committed to ensuring the success and completion of programs by underrepresented and underserved groups. The Lawrence campus is a Hispanic -serving Institution (HSI). Historically, the health programs have been attractive to NECC's Hispanic and minority students and it is reported that certificate programs are frequently selected because of job opportunities. NECC previously developed the

CHW certificate of completion and the proposed ASPH program to complement workforce projections. NECC holds that because of its position as the only ASPH program, graduates will be competitive both for employment positions and for transfer to baccalaureate institutions.

Factors in the Lowell Workforce Investment Area (WIA) and the Merrimack Valley WIA, indicate approximately 4,500 jobs per month and 25 of the most demanded positions require an educational minimum ranging from the associate degree to a doctorate degree. The Occupational Handbook – Bureau of Labor Statistics reports that the Community Health Worker/Health Educator positions are projected to grow 13% from 2014-2024¹.

Student Demand

NECC reports that students, particularly on the Lawrence campus express interest in completing health programs. The students identify job market opportunities and the required education as incentives. Students who have been unable to enroll in other selected health programs are expected to be the first applicants for the proposed programs. In addition many NECC Medical Assistant graduates have expressed interest in the proposed program through informal communication with the Program Coordinator for Medical Assisting about the Associate in Science in Public Health program. In addition, the Lowell Community Health Center (LCHC) is a training site for CHW's and supports this career-ladder opportunity. NECC partners with LCHC to train students in our CHW certificate of completion. NECC is also working with Regis College to articulate the proposed program with the Regis bachelor's program in Public Health.

OVERVIEW OF PROPOSED PROGRAM

Three factors contributed to the development of the proposed ASPH program. First, NECC's Medical Assisting advisory board members discussed the role of CHW's and the planned growth of the position in the health care industry. Second, LCHC expressed interest in partnering with the college to facilitate career ladder opportunities for the LCHC CHW training program. Third, the Community Colleges and Public Health Project report (November 2014) underscored the value of the associate degree in the continuum of public health education.

iHealth@NECC is the college's program for hybrid online learning in the Division of Health Professions. This was developed in 2011 to assist students in the health programs with ease of attending school and completing certificates and associate degrees. It is expected that the proposed associate degree program will be part of iHealth@NECC and the Division of Health Professions, which is a unit within Academic and Student Affairs that offers 13 certificates of completion and 10 associate degree programs.

Duplication

To date, there are no associate degree programs in public health offered by community colleges in Massachusetts. The degree program will be distinguished as the first such program, and provide students with several options for transferability.

¹ <http://www.bls.gov/> Retrieved 12/15/15

ACADEMIC AND RELATED MATTERS

Admission

Students applying to the public health program will be expected to complete the ACCUPLACER assessment validating that the student does not need any developmental courses in reading, writing, and mathematics. Additionally, as prerequisites, it is planned that each student will complete college level English Composition I, Learning Strategies for Success in Healthcare Careers and will attend a general information session outlining the program expectations and outcomes. The curriculum is expected to be delivered over four semesters and include one summer session. The summer session is planned to take place between the first and second year of the program. The anticipated number of students in the first class will be fifteen. If a student must leave the program for any reason, there is a readmission policy which will permit students one readmission to the program. The retention goal is 70% and the first class is expected to graduate in year two. By year five NECC anticipates there will be 44 AS/PH program graduates.

PROGRAM ENROLLMENT

	# of Students Year 1	# of Students Year 2	# of Students Year 3	# of Students Year 4*
New Full-Time	8	8	8	8
Continuing Full-Time	0	8	8	8
New Part-Time	7	7	7	7
Continuing Part-Time	0	3	3	3
Totals	15	26	26	26

Curriculum (Attachment A)

The design for the curriculum was based upon the curricular model for the Public Health Generalist as described in the 2014 *Community Colleges and Public Health Project*. Specifically, the career content courses were developed from the project report and the general education and science courses were chosen based upon the college's required six core academic skills and the Massachusetts Transfer block. The curriculum was designed with input from NECC focus groups, baccalaureate program course work and the prototype model, Public Health Generalist, from the *Community Colleges and Public Health Project Final Report* (November 4, 2014). It is expected that graduates will be able to transfer their AS credits to other public health programs in public or private institutions. The curriculum includes 68 credits offered in a hybrid/blended learning methodology over four semesters and one summer session. It is planned that students will complete 30 credits of career content courses and an additional 38 credits of which 28 are applicable toward the Massachusetts Transfer Block. Additionally, three of the career content courses (CHW 103, CHW 206, CHW 208) and three of the general education/science courses (BIO 120, BIO 121, Humanities elective) fulfill the six core academic

skills required for graduation in an associate degree program at NECC. Two courses in the curriculum are required as prerequisites for admission: English Composition I and Learning Strategies for Success in Healthcare Careers. Both courses are designed to enhance student success by developing writing skills and optimizing strategies to manage educational demands.

Internships or Field Studies

A three-credit experiential practicum is planned to be completed during the final semester of the proposed program, and prior to graduation. The practicum is intended to provide the students with hands-on experiences and mentorship in an area of public health. NECC has received four letters of support to provide practicum placements for the students, the City of Lawrence Mayor's Health Task Force, New England Allergy Asthma & Immunology, the Lowell Community Health Center and Nevins Family of Services. Formal contracts will be obtained once the program has been approved.

RESOURCES AND BUDGET

Fiscal (Attachment B)

Annually the iHealth budget for new and existing programs is prepared and submitted as part of the overall college budget and financing process. All programs are designated with a unique cost center and the budget is developed with faculty input and consistent with annual program goals and outcomes. The iHealth program budget requests are forwarded to the Assistant Dean/Director of iHealth for final compilation within the Division of Health Professions.

The tuition costs for iHealth students are comparable to other health programs and differences in cost per credit/fees are determined by residence (Massachusetts, New England, elsewhere in the US and international). NECC estimates that, on average, a Massachusetts resident participating in an iHealth program will pay \$282/credit. The estimated cost for completing the Associate in Science Public Health (Massachusetts resident) is \$21,700.

In creating the FY17 budget no increases in tuition/fees were predicted from FY16. The incoming class is based upon Massachusetts residents. In year one NECC anticipates that 8 new full-time students and 7 new part-time students will enroll in the program. NECC is assuming a retention rate of 70% consistent with NECC current health programs. It is anticipated that years two through four will not require additional resources.

Faculty and Administration (Attachment C)

The coordinator job description for the proposed program has been written and, once approved, the position will be posted. NECC anticipates the coordinator will be hired with a start date of July 1, 2016. The coordinator will oversee the program, design the systematic plan for outcome assessment and valuation and teach courses in the second year of the program.

There are 25 full-time faculty and 52 part-time faculty supported by two administrative assistants, two iHealth coach/mentors, a laboratory/supply coordinator, simulation coordinator and a statistician in the Division of Health Professions. Several faculty (full-time and adjunct) are expected to teach specific Public Health courses in the program. Each of these members

has participated in the orientation to blended/online learning and has completed the iTeach² curriculum. Additionally, it is planned that general education/science courses will be taught by full-time and adjunct faculty at NECC.

Facilities, Library and Information Technologies

The annual budget for the program incorporates funding for faculty, professional development and professional memberships. Additionally, instructional materials/supplies, equipment (capital and non-capital), books and journals will be included.

The Haverhill and Lawrence campus libraries currently hold approximately 351 total print volumes (340 unique titles) under the subject heading and subheadings of 'Public Health'. Overnight delivery is available between the two campuses for all volumes held by NECC. This total does not include related health topics that may be classified in other areas. The libraries have developed a core titles list that will add approximately 30 additional volumes to the print holdings in Lawrence. For titles not held, the libraries' access to the North of Boston Library Exchange (NOBLE) library consortium consisting of 28 public and academic libraries and the ComCat statewide catalog provide students with the ability to request from hundreds of additional titles from partner libraries. The NECC libraries also subscribe to 67 databases, 10 of which specifically index health publications and journals. These databases provide full text access to 38 journals under the subject heading of 'Public Health', 29 under 'Health Policy', 13 under 'Epidemiology', as well as over 2,500 other publications in the health and medical fields.

The Public Health program will be located at 52 Franklin Street, an 11,000 square foot building in downtown Lawrence. The facility includes general classrooms, a computer laboratory, and administrative/faculty space. General education and science courses will be taught throughout the Lawrence Campus at the Dimitry, Amesbury, and El Hefni buildings.

Affiliations and Partnerships

NECC designed the associate degree curriculum to facilitate transfer to baccalaureate programs, specifically four-year universities and/or colleges. Upon approval to award the Associate in Science Public Health, Northern Essex Community College will sign a formal articulation agreement with Regis College: Regis North @ NECC campus³. Students will enter the Public Health Program in their third year and complete a bachelor of arts degree. Articulation agreements are also planned for development with the University of Massachusetts/Lowell (BS in Public Health), Southern New Hampshire University (BS in Public

² *iTEACH is a faculty development program for learning to design an online or hybrid course. Its primary focus is to develop a solid foundation which will enable faculty to evaluate and analyze all aspects of curriculum and change faculty/student interactions in and out of the classroom. iTEACH provides both pedagogical and technical instruction to best adapt and integrate learning technologies into curriculum. It is an exclusive program for qualified full and part time faculty who are expanding teaching to the online format and includes an intense 2-week online course that will provides foundational knowledge for constructing online or hybrid course.*

³ *Students may earn a bachelor's degree at the new Regis College, Weston MA satellite campus at Northern Essex Community College in Lawrence, MA. Students with an associate's degree can begin courses toward a Bachelor of Science in Nursing or a Bachelor of Arts in Public Health from Regis. Nursing courses are open to students who hold an AS in nursing. Public Health courses are open to students who hold an associate's degree in any discipline.*

Health) and Rivier University (BS in Public Health).

It is further planned that an advisory committee will be formed utilizing many of the members from the initial program focus group as well as additional members of area healthcare agencies who employ public health professionals. A complete list of members and affiliations was included in the proposal. It is expected that that proposed program advisory board will meet twice each academic year in accordance with the college's advisory board policies and procedures. Additionally advisory boards work with program coordinators and faculty to recommend curriculum changes to ensure the program is current with the needs of the workforce and public health initiatives.

PROGRAM EFFECTIVENESS

The goals of the Public Health program are to graduate entry-level public health generalists, to promote educational and career mobility, and to graduate students who reflect the diversity of the communities NECC serves.

Goal	Measurable Objective	Strategy for Achievement	Timetable
1. To graduate entry-level public health generalists.	Graduate at least 70% of the students within 3 years of admission to the program.	Insure that all students in the program complete the readings for blended/online learning and have a plan developed for any areas requiring improvement. Utilize iHealth and College services. Coach and mentor students regarding tutoring, study habits and managing multiple work/family demands.	Beginning Fall 2016 and ongoing.
		Insure all faculty have completed iTeach certification for blended/online education.	Beginning Fall 2016 and ongoing.
	Seventy (70%) of the students will report satisfaction with the program.	Implement graduate satisfaction surveys 9-12 months after graduation.	Beginning Spring 2019 and ongoing.
2. To promote educational and career mobility.	Provide a curriculum that is articulated with Regis College/ Regis North @ NECC.	Review the curriculum on an ongoing basis (annually or as articulation agreement indicates) Additionally, explore the current standards for Council on Education for Public Health(CEPH) and status of accreditation for Associate Degree programs to determine and inform	Beginning Fall 2016 and ongoing.

		curricular revisions.	
	Seventy (70%) of the students will be employed within one year in public health or related field or in pursuit of a higher degree.	Review feedback from graduates, employers and advisory boards.	Beginning Fall 2016 and ongoing.
3. To graduate students who reflect the diversity of the communities we serve.	Retain 70% of under-represented groups who enroll in the Public Health program.	Implement and educate students about peer, professional and online tutoring opportunities. Utilize iHealth coach advisors to identify students at risk and develop a plan for student success, strategies to include review of financial needs, family demands and student work/study habits.	Beginning Fall 2016 and ongoing.

EXTERNAL REVIEW AND INSTITUTIONAL RESPONSE

On November 12, 2015 a site visit and external review was conducted by Denise Bisailon, Ed.D., Associate Dean, School of Public Health at Southern New Hampshire University in Manchester NH and Laura Burke, Sc.D., MPH, Associate Professor and Program Director, Public Health & Associate Dean, Health Sciences at Regis College in Weston MA. The team found the program to be perfectly aligned with the field's highest standards, recommended the proposed curricular model for a public health AS program, and designed to deliver foundational knowledge that will successfully transfer to baccalaureate programs in public health, health education, health management and administration and environmental health programs. The external review indicated there was an effective relationship between core course content and professional practice via the practicum experience in the program, and that it addresses a critical need for public and community health workers. The reviewers also found that the program was developed in tandem with the community and will play a crucial role in meeting the needs of the community. The team suggested that NECC make a curricular adjustment to offer statistics during the third semester, have fewer course objectives, map curriculum to learning outcomes, carefully align courses with the MassTransfer block and consider inter-professional education among all the health professionals.

NECC concurred with most of the recommendations of the review team and made the necessary changes in the final proposal to reflect them. Regarding the MassTransfer block, NECC indicated that students in the AS programs at NECC have more science and math credits than are required by MassTransfer and that they fulfill 28 of the 34 credits in the block. The Health Professions faculty conferred with the Dean of Health Professions, Dean of Academic Support Services, Articulation and Transfer and the Director of Financial Aid and determined that the Associate in Science in Public Health students will be informed that upon acceptance to the Public Health Program they should request that the MassTransfer Block be added to their Plan of Study. This determination will document the intent of the student to transfer to a baccalaureate program upon graduation, and it will make the student eligible to complete the specified courses of the program, as well as earn the six credits required to complete the block. This option will be covered by financial aid.

STAFF ANALYSIS AND RECOMMENDATION

Staff thoroughly reviewed all documentation submitted by Northern Essex Community College and the external reviewers. Staff recommendation is for approval of the proposed **Associate in Science in Public Health**.

ATTACHMENT A: CURRICULUM

Required (Core) Courses in the Major (Total # courses required = 10)		
<i>Course Number</i>	<i>Course Title</i>	<i>Credit Hours</i>
CHW 100	Personal Health and Wellness	3
CHW 101	Intro to Public Health	3
CHW 102	Health Communications	3
CHW 103	Health Education	3
CHW 202	Introduction to Public Health Administration	3
CHW 204	Environmental Health	3
CHW 206	Prevention and Community Health	3
CHW 208	Public Health and Preparedness	3
CHW 290	Public Health Practicum/Seminar	3
HES 102	Learning Strategies for Success in Healthcare	3
	Sub Total Required Credits	30
Elective Courses (Total # courses required = 1) (attach list of choices if needed)		
[Course Number]	Humanities Elective	3
	Sub Total Elective Credits	3
Distribution of General Education Requirements		# of Gen Ed Credits
Attach List of General Education Offerings (Course Numbers, Titles, and Credits)		
Arts and Humanities, including Literature and Foreign Languages ENG101 English Comp I, ENG 102 English Comp II, PHI 101 Intro to Philosophy		9
Mathematics and the Natural and Physical Sciences BIO 115 Phys Chem, BIO 121 A&P I, BIO 122 A&P II, BIO 220 Microbiology, MAT 125 Statistics		20
Social Sciences PSY 101 Intro to Psychology, SOC 101 Intro to Sociology		6
Sub Total General Education Credits		35
Curriculum Summary		
Total number of courses required for the degree		21
Total credit hours required for degree		68
Prerequisite, Concentration or Other Requirements:		
CORI/CHRI/SORI: Students interested in participation in this academic program may be required to undergo a Criminal Offender Record Information (CORI) check, a Criminal Records Central Repository (CHRI) check and/or a Sex Offender Registry Information (SORI) check. For more information, visit the CORI/CHRI/SORI page on the NECC website.		
Drug Screening: Students enrolled in this academic program are required to pass a drug screening analysis.		
Health: Students are required to complete a health evaluation, including the Hepatitis B immunization series, prior to final acceptance to the Program		
Student Professional Liability Insurance: Students are required to carry professional liability insurance. The premium is to be paid at the time of course registration.		

ATTACHMENT B: BUDGET

<i>One Time/ Start Up Costs</i>	<i>Cost Categories</i>	<i>Annual Expenses</i>			
		<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>
	Full-Time Faculty (Salary & Fringe)	84,000	87,000	90,045	94,500
	Part-Time/Adjunct Faculty (Salary & Fringe)	54,750	70,090	70,090	70,090
	Staff				
	General Administrative Costs	9,000	17,500	12,000	12,000
	Instructional Materials, Library Acquisitions	7,000	3,000	3,000	3,000
	Facilities/Space/Equipment	3,000	500	500	500
	Field & Clinical Resources	1,500	1,000	1,000	1,000
	Marketing	1,000	750	250	250
	Other (Specify)	8,500	4,000	4000	4,000
	TOTALS	168,750	183,840	180,885	185,340

<i>One Time/Start- Up Support</i>	<i>Revenue Sources</i>	<i>Annual Income</i>			
		<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>
	Grants				
	Tuition	13,650	20,275	20,275	20,275
	Fees	124,200	188,245	188, 245	188, 245
	Departmental				
	Reallocated Funds				
	Other				
	TOTALS	137,850	208,520	208,520	208,520

ATTACHMENT C: FACULTY

Summary of Faculty Who Will Teach in Proposed Program							
Name of faculty member (Name, Degree and Field, Title)	Check if Tenured	Courses Taught Put (C) to indicate core course. Put (OL) next to any course currently taught online.	Number of sections	Division of College of Employment	Full- or Part- time in Program	Full- or part-time in other department or program	Sites where individual will teach program courses
TBD Program Coordinator	<input type="checkbox"/>	<ul style="list-style-type: none"> • Introduction to Public Health Administration • Public Health Preparedness • Practicum/Seminar 	1 1 1	Day	Full-Time	No	• Lawrence
Capozzi, Julie M.Ed. Instructor	<input type="checkbox"/>	<ul style="list-style-type: none"> • Psychology 101 	1	DCE	Part-Time	No	• Lawrence
Carles, Maria Ph.D. Biomedical Sciences/Immunology Professor	<input type="checkbox"/>	<ul style="list-style-type: none"> • Anatomy and Physiology I • Anatomy and Physiology II • Physiological Chemistry 	1 1 1	DCE	Part-Time	Yes Science Department	• Lawrence
Demers, Patricia MPH, Public Health MS, BSN, Nursing Adjunct Faculty	<input type="checkbox"/>	<ul style="list-style-type: none"> • Introduction to Public Health • Prevention and Community Health 	1 1	DCE	Part-Time	No	• Lawrence

Faticanti, Regina MS Instructor	<input type="checkbox"/>	<ul style="list-style-type: none"> • Sociology 101 	1	DCE	Part-Time	No	• Lawrence
Kane, Sheila MS, RN, CNM, CNE, WHCNP-BC, CCS Nursing Professor	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> • Personal Health and Wellness • Learning Strategies for Success in Healthcare 	1 1	DCE	Part-Time	Yes Nursing	• Lawrence
Murray, John MPH, Public Health RRT, RPSGT Respiratory Therapy Professor	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> • Health Education • Environmental Health 	1 1	DCE	Part-Time	Yes Respiratory Care Sleep Technology	• Lawrence
Nickels, Michael MS, Biology Instructor	<input type="checkbox"/>	<ul style="list-style-type: none"> • Microbiology 	1	DCE	Part-Time	No	• Lawrence
Welch Hudson, Kathy MS, Human Service Administration BS, Nursing Professor	<input checked="" type="checkbox"/>	<ul style="list-style-type: none"> • Health Communications 	1	DCE	Part-Time	Yes Medical Assisting	• Lawrence
Yarborough, Elle Ph.D., English Education	<input type="checkbox"/>	<ul style="list-style-type: none"> • English Comp I • English Comp II 	1 1	DCE	Part-Time	Yes English Department	• Lawrence