

**STATE BOARD OF COMMUNITY COLLEGES**  
**Curriculum Program Applications**  
**Fast Track for Action [FTFA\*]**

**Request:** The State Board of Community Colleges is asked to approve the curriculum programs at the listed colleges on the condition that equipment funds are available to the college and operating funds generated by the budget formula will permit the offering of these programs without any special allocation of funds.

Cape Fear Community College  
Human Services Technology/Substance Abuse (A4538E)  
Medical Assisting (A45400)

Central Carolina Community College  
Medical Sonography (A45440)

Nash Community College  
Fire Protection Technology (A55240)

Sandhills Community College  
Fire Protection Technology (A55240)

Wilson Community College  
Biotechnology (A20100)

**Background:** Program applications must meet the following criteria in order to be placed on the Fast Track For Action (FTFA) program approval request presented to the State Board of Community Colleges as part of the consent agenda:

- The curriculum program title currently exists within the System and does not require the creation of a new program title and new curriculum standard;
- The application is complete, requires no further analysis or documentation, and has the endorsement of Academic Programs;
- There are no negative impact assessments from other colleges; and
- The college does not go outside of its service area for planning purposes.

**Contact(s):**

Jennifer Frazelle  
Director

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Cape Fear Community College  
Human Services Technology/Substance Abuse (A4538E)**

**Program Planning:** Cape Fear Community College is seeking approval for the Medical Assisting program to begin Fall 2018. The planning area is defined as the college's service area of New Hanover and Pender counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Cape Fear Community College on August 17, 2017. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Cape Fear Community College have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to maintain a viable program and certify that the college can operate the proposed program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

**Program Rationale:** Cape Fear Community College (CFCC) indicates the following:

- Like much of the country, North Carolina has seen dramatic increases in addiction and overdose rates in recent years. *Since 1999, deaths resulting from drug overdose have increased three-fold nationwide. In North Carolina, drug overdose deaths increased 14.5% from 2014 to 2015.* (Morbidity and Mortality Weekly Report, 2016)
- *Since 2010, deaths resulting from heroin overdoses in North Carolina increased 884%.* (Opioid Overdose and North Carolina's Public Health and Prevention Strategies, 2016)
- CFCC's service area of New Hanover and Pender counties have been hit hard by opioid addiction. In a 2016 study conducted by Castlight Health, *Wilmington was found to have the highest rate of prescription opioid abuse in the country, with an estimated 11.6% of Wilmington residents classified as opioid abusers.*
- The US Bureau of Labor and Statistics projects that over 41,000 openings for substance abuse and behavioral disorder counselors will be created by 2024.

- The NC Department of Commerce notes *that substance abuse and behavioral disorder counselors are expected to increase almost 32% by 2022. They project 214 new openings in the areas of mental health/substance abuse social workers and substance abuse/behavioral disorder counselors in the southeastern part of the state by 2022.*
- The Dean and Professor of the College of Health and Human Service at UNC Wilmington noted, *the program will prepare students to gain employment in inpatient and outpatient drug and alcohol programs including counseling, prevention, treatment and education. Additionally, students from the program will graduate with both a degree and a certification through the NC Substance Abuse Professional Practice Board as a Substance Abuse Counselor, Intern.*
- In his letter of support, the Executive Director of the South East Area Health Education Center (SEAHEC) noted *the future workforce is an important asset if we are to reverse the trends of opioid misuse in our region.*
- CFCC received a letter of support for the program from the Executive Director of the North Carolina Harm Reduction Coalition (NCHRC).

**Impact of the Proposed Program on Other Programs:** Eleven community colleges are approved to offer the Human Services Technology/Substance Abuse program. One of these colleges is located in a contiguous county and was provided a program impact assessment from CFCC. **The college located in the contiguous county is in agreement with the impact assessment.**

**Implementation of Collaborative Plan:** Not Applicable

**Curriculum Design:** The proposed program of study is in compliance with the State Board approved curriculum standard.

**Curriculum Description as Designated on Curriculum Standard:**

*The Human Services Technology/Substance Abuse concentration prepares students to assist in drug and alcohol counseling, prevention-oriented educational activities, rehabilitation with recovering clients, managing community-based programs, counseling in residential facilities, and pursuit of four-year degrees. Course work includes classroom and experiential activities oriented toward an overview of chemical dependency, psychological/sociological process, the twelve Core Functions, intervention techniques with individuals in groups, and follow-up activities with recovering clients. Graduates should qualify for positions as substance abuse counselors, DUI counselors, halfway house workers, residential facility employees, and substance education specialists. With educational and clinical experiences, graduates can obtain certification by the North Carolina Substance Abuse Board.*

**Contact(s):**  
Renee Batts  
Associate Director

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Cape Fear Community College  
Medical Assisting (A45400)**

**Program Planning:** Cape Fear Community College is seeking approval for the Medical Assisting program to begin Fall 2018. The planning area is defined as the college's service area of New Hanover and Pender counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Cape Fear Community College on August 17, 2017. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Cape Fear Community College have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to maintain a viable program and certify that the college can operate the proposed program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

**Program Rationale:** Cape Fear Community College (CFCC) indicates the following:

- According to the US Bureau of Labor and Statistics, the national employment growth rate for medical assistants is 23% from 2014 to 2024. The growth rate is primarily being driven by the care needs of the nation's aging population.
- It is noted in the Southeast Region Occupational Projections Data from the NC Department of Commerce; *Medical Assisting is projected to have an employment growth rate of 35.8% from 2012 to 2022. This growth is projected to include 619 new positions in this area, with an average of 95 new openings per year.*
- CFCC's service area of New Hanover and Pender counties includes a significant number of retirement communities and the area's largest healthcare sector, will likely account for a major portion of the need for additional medical assistants.
- According to Indeed.com in September 2017, 74 medical assistant positions were open in the Wilmington area.

- The Vice President of the New Hanover Regional Medical Center (NHRMC) Physicians Group indicated: *Healthcare providers in southeastern North Carolina are in a particular need of medical assistants, with the region's growing population of retirees creating increased demands on providers' client care and administrative functions.* The NHRMC Physicians Group is composed of more than 230 health care providers located in more than 40 locations within CFCC's service area.
- In a letter of support from the Director of Marketing and Public Relations at New Hanover Regional Medical Center it was noted, *there is a real need in our area for more professionals with this training, and I am confident that such a program will prove beneficial for our community.*

**Impact of the Proposed Program on Other Programs:** Forty-one community colleges are approved to offer the Medical Assistant program. This program contains a clinical component; therefore, each college was provided with a program impact assessment from CFCC. Initially, Brunswick Community College did not concur with the impact assessment. This issue has been resolved. **All colleges approved to offer the program are in agreement with the impact assessment.**

**Implementation of Collaborative Plan:** Not Applicable

**Curriculum Design:** The proposed program of study is in compliance with the State Board approved curriculum standard.

**Curriculum Description as Designated on Curriculum Standard:**

*The Medical Assisting curriculum prepares multi-skilled health care professionals qualified to perform administrative, clinical, and laboratory procedures. Course work includes instruction in scheduling appointments, coding and processing insurance accounts, billing, collections, computer operations; assisting with examinations/treatments, performing routine laboratory procedures, electrocardiography, supervised medication administration; and ethical/legal issues associated with patient care. Graduates of CAAHEP-accredited medical assisting programs may be eligible to sit for the American Association of Medical Assistants' Certification Examination to become Certified Medical Assistants. Employment opportunities include physicians' offices, health maintenance organizations, health departments, and hospitals.*

**Contact(s):**

Renee Batts  
Associate Director

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Central Carolina Community College  
Medical Sonography (A45440)**

**Program Planning:** Central Carolina Community College is seeking approval for the Medical Sonography program to begin Fall 2018. The planning area is defined as the college's service area of Lee, Harnett and Chatham counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Central Carolina Community College on October 26, 2016. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Central Carolina Community College have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to maintain a viable program and certify that the college can operate the proposed program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

**Program Rationale:** Central Carolina Community College (CCCC) indicates the following:

- According to the US Bureau of Labor and Statistics, the national employment growth rate for diagnostic medical sonographers is 26% from 2014 to 2024. As the large baby-boom population ages, the need to diagnose medical conditions such as blood clots and heart disease will likely increase. Ultrasound is often less expensive than other imaging technologies and is often used as a first-line tool for diagnosis. Third-party payers encourage the use of these noninvasive measures over invasive ones to save on costs.
- According to the North Carolina Department of Commerce Labor Economic Analysis, diagnostic medical sonographers is one of the top ten jobs for the state, and is considered a five-star job, meaning it has the highest projected growth rate and projected job openings in the college's local region of Raleigh/Durham and Fayetteville/Lumberton.
- According to O\*Net, the need for diagnostic medical sonographers in North Carolina will increase from 1,930 in 2014 to 2,590 in 2024, at an increase of 34%, and the annual projected job openings are 100 jobs.

- According to Indeed.com on September 27, 2017, there were 74 full-time job openings for diagnostic medical sonographers within a 100-mile radius of Sanford, North Carolina. Fifty-six of the 74 full-time job openings were entry-level positions.
- At the Diagnostic Medical Sonography Planning meeting, the CEO of the Central Carolina Hospital indicated: *The sonography program should be the number one program to focus on in their service area. We have four hospitals that have been wanting to pursue this program since 2014.* Central Carolina Hospital is partners with Life Point. The “total” Duke Life Point system sonography vacancies in NC are 35 and 3 of these vacancies are at Central Carolina Hospital.
- CCCC received letters of support from the Associate Dean for Clinical Integration/Professor of Emergency Medicine at Campbell University School of Osteopathic Medicine, the CEO at Central Carolina Hospital, the President at Chatham Hospital UNC Health Care, and the President at Harnett Health System.

**Impact of the Proposed Program on Other Programs:** Eight community colleges are approved to offer the Medical Sonography program. This program contains a clinical component; therefore, each college approved to offer Medical Sonography was provided with a program impact assessment from CCCC. There were two colleges that expressed concerns that clinical site placements may be affected, job market saturation may result and a negative impact on salaries could occur but they were supportive of the college pursuing the program. Initially, Johnston Community College did not concur with the impact assessment. Johnston Community College now agrees with the impact assessment resolution but has reservations regarding job market saturation. **All colleges approved to offer the program are in agreement with the impact assessment.**

**Implementation of Collaborative Plan:** Not Applicable

**Curriculum Design:** The proposed program of study is in compliance with the State Board approved curriculum standard.

**Curriculum Description as Designated on Curriculum Standard:**

*The Medical Sonography curriculum provides knowledge and clinical skills in the application of high frequency sound waves to image internal body structures. Course work includes physics, cross-sectional anatomy, abdominal, introductory vascular, and obstetrical/gynecological sonography. Competencies are attained in identification of normal anatomy and pathological processes, use of equipment, fetal growth and development, integration of related imaging, and patient interaction skills. Graduates of accredited programs may be eligible to take examinations in ultrasound physics and instrumentation and specialty examinations*

*administered by the American Registry of Diagnostic Medical Sonographers and find employment in clinics, physicians' offices, mobile services, hospitals, and educational institutions.*

**Contact(s):**

Renee Batts  
Associate Director

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Nash Community College  
Fire Protection Technology (A55240)**

**Program Planning:** Nash Community College (NCC) is seeking approval for the Fire Protection Technology (A50240) program to begin Spring 2018. The planning area is defined as the college's service area of Nash County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at NCC on July 20, 2015. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of NCC have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to maintain a viable program and certify that the college can operate the proposed program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

**Program Rationale:** Nash Community College indicated the following:

- The U.S. Department of Labor has estimated that from 2012-22 there will be 9-10% growth nationally in fire services including first-line supervisors and protective service workers, fire fighting and prevention workers, and firefighters.
- According to NC Department of Commerce, there are approximately 36,000 people employed in the fire protection sector statewide with a median salary of \$55,000 per year.
- Nash County has found it necessary to expand fire services by moving to a combination model of career and voluntary firefighters to achieve round-the-clock emergency coverage. This requires staffing approximately 131 positions which represents a large personnel increase to meet coverage requirements within the county. Rocky Mount Fire Department indicated that they expect to require approximately 30 new hires over the next five years.
- Nash CC has successfully offered an Emergency Management program for over a decade and have been prompted by the City of Rocky Mount Fire Department and Nash-Rocky Mount Public School system to expand the public safety program to include Fire Protection Technology. Student interest in public safety programs has been excellent.

- Nash County, Rocky Mount, and Nashville Fire departments see the program as an opportunity for ongoing incumbent employee education and professional development that has been tied to promotions and required, at the associate degree level, for the position of captain or higher.
- A letter of support for the program was received from the Nash County Volunteer Fire and rescue Association, and the City of Rocky Mount Fire Department.
- The college will offer the program completely online to make the instruction readily accessible to professionals already working in the field and face-to-face through the Career and College Promise dual enrollment program so that monitoring of student success will be more proficient for a younger audience not necessarily used to the rigor of college coursework.
- The cost of the program is expected to be minimal since the Fire Protection Technology program can be considered an expansion of current course offerings already being taught through emergency management and through comprehensive continuing education fire services coursework which includes 101 students enrolled in public safety in 2017.

**Impact of the Proposed Program on Other Programs:** Twenty colleges are approved to offer the Fire Protection Technology program. An impact assessment was sent to colleges located in contiguous counties. **No negative impact responses were received.**

**Implementation of Collaborative Plan:** Not Applicable

**Curriculum Design:** The proposed program of study is in compliance with the State Board approved curriculum standard.

**Curriculum Description as Designated on Curriculum Standard:** *The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration. Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies. Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations. examinations.*

**Contact(s):**

Dr. Frank Sculetta  
Program Coordinator

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Sandhills Community College  
Fire Protection Technology (A55240)**

**Program Planning:** Sandhills Community College (SCC) is seeking approval for the Fire Protection Technology (A50240) program to begin Fall 2018. The planning area is defined as the college's service area of Moore and Hoke counties. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at SCC on September 11, 2017. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of SCC have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to maintain a viable program and certify that the college can operate the proposed program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

**Program Rationale:** Sandhills Community College indicated the following:

- The U.S. Bureau of Labor Statistics Occupational Network anticipates a 10% growth increase in employment opportunities over the next ten years nationally.
- State-wide entry-level wages for individuals employed with the fire protection community, including fire fighters, fire inspectors and investigators, and supervisors of firefighting and prevention, is between \$22,000 and \$40,000 annually.
- The college surveyed potential local employers to determine their employment needs. Employers anticipated that they would require between 10-11 employees annually.
- According to NC Department of Commerce, there are approximately 36,000 people employed in the fire protection sector statewide.
- The college currently operates a successful fire protection education program in continuing education which houses appropriate training facilities, including a burn building and four-story training tower. The college has a mutual aid agreement with all fire departments in its service area that allows access to various equipment, including fire trucks, that are used for training purposes.
- SCC surveyed potential students and determined that there was significant enrollment potential to support annual enrollment in the program between 30-40 students.

**Impact of the Proposed Program on Other Programs:** Twenty colleges are approved to offer the Fire Protection Technology program. An impact assessment was sent to colleges located in contiguous counties. **No negative impact responses were received.**

**Implementation of Collaborative Plan:** Not Applicable

**Curriculum Design:** The proposed program of study is in compliance with the State Board approved curriculum standard.

**Curriculum Description as Designated on Curriculum Standard:** *The Fire Protection Technology curriculum is designed to provide students with knowledge and skills in the technical, managerial, and leadership areas necessary for advancement within the fire protection community and related firefighting industries, and to provide currently employed firefighters with knowledge and skills often required for promotional consideration. Course work includes diverse fire protection subject areas, including fire prevention and safety, public education, building construction, fire ground strategies and tactics, and local government finance and laws, as they apply to emergency services management. Emphasis includes understanding fire characteristics and the structural consequences of fire; risk assessment and management; and relevant research, communications, and leadership methodologies. Employment opportunities exist with fire departments, governmental agencies, industrial firms, insurance rating organizations, and educational organizations. examinations.*

**Contact(s):**

Dr. Frank Sculetta  
Program Coordinator

**PROGRAM APPLICATION  
SUMMARY EVALUATION REPORT  
Wilson Community College  
Biotechnology (A20100)**

**Program Planning:** Wilson Community College is seeking approval for the Biotechnology (A20100) program to begin Fall 2018. The planning area is defined as the college's service area of Wilson County. All colleges were notified of the planning process for this program.

The proposed program was approved by the Board of Trustees at Wilson Community College on May 1, 2017. Minutes from this Board meeting were attached to the program application. The President and the Board of Trustees of Wilson Community College have certified the following:

- The proposed program will enhance the workforce of North Carolina, will provide educational and training opportunities consistent with the mission of the college, and will not duplicate the opportunities currently offered.
- They have assessed the need for the proposed program and the resources required to program efficiently and effectively within the resources available to the college.
- The college will complete a program accountability report including student success measures, enrollment trends, completion rates, and employment data three years after implementation of the program.

**Program Rationale:** Wilson Community College (WCC) indicates the following:

- The largest industry sector in Wilson is manufacturing. There are ninety manufacturers within the county which includes: pharmaceuticals, automotive parts, aerospace, packaging, food preparation and the tire industry.
- Merck, Sandoz, Fresenius-Kobi and Purdue are the four major pharmaceutical manufacturers in Wilson County. In meetings with WCC, they indicated a shortfall of technical level workers to meet their employment needs and are seeking ways to increase their qualified applicant pool. Specifically, they indicated a significant need for skilled workers in the areas of production, the warehouse, and in the laboratory.
- According to the North Carolina Department of Commerce, although manufacturing is expected to see a decline in jobs in the next ten years, pharmaceutical manufacturing is expected to see an increase during the same time.
- According to the June 2017 Pharmaceutical Research and Manufacturers of America (PhRMA) and TEconomy Partners, LLC report, "*companies should design curriculums in collaborations with technical and community colleges.*" The report supports the need to develop a talent pipeline to meet the needs of the pharmaceutical industry.

- Wilson's pharmaceutical manufacturing facilities employ over 800 workers with an average hourly wage of \$20.00. According to the US Bureau of Labor Statistics, the median annual wage for pharmaceutical tech workers is \$45,840 (or \$22.00/hour) in 2016.
- In Fall 2016, WCC and Wilson County Schools partnered to start an early college with a focus on technical programs. The advisory committee for the early college has expressed the need to include a pathway in biotechnology.
- In Spring 2017, WCC surveyed high school and current community college students to determine if there is an interest in Biotechnology. Forty-one percent of the students surveyed indicated they are interested in enrolling in this program.
- From Fall 2007 to Fall 2017, WCC and Pitt Community College had an Instructional Service Agreement (ISA) III for the Biotechnology program.

**Impact of the Proposed Program on Other Programs:** Seven community colleges are approved to offer the Biotechnology program. One of these colleges is located in a contiguous county and was provided a program impact assessment from WCC. **The college located in the contiguous county is in agreement with the impact assessment.**

**Implementation of Collaborative Plan:** Not Applicable

**Curriculum Design:** The proposed program of study is in compliance with the State Board approved curriculum standard.

**Curriculum Description as Designated on Curriculum Standard:**

*The Biotechnology curriculum, which has emerged from molecular biology and chemical engineering, is designed to meet the increasing demands for skilled laboratory technicians in various fields of biological and chemical technology. Course work emphasizes biology, chemistry, mathematics, and technical communications. The curriculum objectives are designed to prepare graduates to serve in three distinct capacities: research assistant to a biologist or chemist, laboratory technician/instrumentation technician, and quality control/quality assurance technician. Graduates should be qualified for employment in various areas of industry and government, including research and development, manufacturing, sales, and customer service.*

**Contact(s):**

Renee Batts  
Associate Director