Request for Authorization to <u>Establish</u>
Master of Science (MS) in Physician Assistant Studies
CIP 19.0101
North Carolina Agricultural and Technical State University

I.   Program Highlights

- North Carolina Agricultural and Technical State University proposes the establishment of an online Master of Science (MS) in Physician Assistant Studies.
- The physician assistant studies program will address the shortage and lack of diversity in the healthcare workforce in North Carolina and across the nation.
- The proposed program is a 24-month, 96 credit-hour, full-time graduate program that will prepare students to function as competent and safe generalist physician assistants. Graduates will be prepared to enter careers in a wide variety of healthcare industries, including primary and tertiary health care systems, long-term facilities, outpatient and extended care, retail health care, pharmaceutical and other health industries.
- Physician assistants are licensed by the North Carolina Medical Board to practice medicine under the supervision of a physician. Students in the proposed physician assistant program will graduate with competencies for certification by the Medical Board.
- Graduates of the program will be equipped with skills essential to addressing the healthcare needs of the citizens of the state of North Carolina.

II.   Academic Program Planning Criteria (UNC Policy 400.1)

1. **Relation to Campus Distinctiveness and Mission.** This program is well aligned with the North Carolina A&T's mission. As "an 1890 land-grant doctoral research institution" the university prepares students to "advance the human condition and facilitate economic growth in North Carolina and beyond by providing a preeminent and diverse educational experience through teaching, research, and scholarly application of knowledge." The proposed physician assistant studies program will prepare graduates to assume the role of physician assistants in healthcare and health-related careers.

2. **Student Demand.** Student demand for physician assistant programs is very high. Programs at East Carolina University and the University of North Carolina at Chapel Hill regularly receive far more student applications than they can enroll. In 2019, the application/acceptance ratio at the two institutions was 511/54 and 742/20, respectively.

   Data from an EMSI survey demonstrated strong support for increasing physician assistant programs by healthcare providers in North Carolina, and a willingness for physicians in the Triad region of North Carolina to serve as preceptors. More importantly, students from community colleges and four-year colleges expressed great interest in the program, indicating the program will meet the needs of students in the state of North Carolina.

3. **Employment Opportunities for Graduates.** A 2018 NC Tower survey of public university physician assistant master's programs found the median annual salary for graduates was $73,104. Data from the US Bureau of Labor Statistics indicate employment of physician assistants is projected

to grow 31 percent from 2020 to 2030, much faster than the average for all occupations. About 12,200 openings for physician assistants are projected each year, on average, over the next decade. Many of those openings are expected to result from the need to replace workers who transfer to different occupations or exit the labor force in retirement.

Demand for healthcare services is projected to increase due to the growing and aging population. Members of the large baby boomer generation will require more medical care as they age. Growth in the number of patients with chronic diseases, such as diabetes, will also increase healthcare demand and, in turn, drive the need for healthcare providers including physician assistants who often provide preventive care and treat the sick.

4. **Impact on Access and Affordability.** In the 2019, Annual Report of the National Commission of Certified Physician Assistants, 12.9 percent of the North Carolina physician assistant students responding to the survey reported no debt, compared to 10.2 percent anticipating no debt at the national level. The median and mean educational debt of recently certified physician assistants in North Carolina are $112,500 and $114,539, respectively.

In 2020, the average in-state and out-of-state cost of tuition for physician assistant programs was $91,631.00 (in- and out-of-state tuition was the same). With a projected total program cost of less than $42,000 for in-state students (including a special fee for preceptors and separately approved tuition differential), the program will provide an affordable option.

Tuition and fees for the 2022-23 full-time (9+ credit hour) rates are as follows:

Full-Time 2022-2023 Master's Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition	$4,745.00	$17,545.00
Tuition Differential	$2,250.00	$2,250.00
Mandatory Fees (Educational & Technology, Campus Security, Debt Service, ASG)	$530.06	$530.06
Special Fees (One-time, year 2 only)	$11,000.00	$11,000.00

5. **Expected Quality.** This program will offer students an affordable path to acquire a physician assistant education that will prepare them to practice in diverse healthcare settings. Students will acquire core knowledge on the genetic, cellular, and molecular mechanisms of disease as well as appropriate pharmacotherapeutics. Graduates will acquire technical skills relevant for performing physical exams, evaluating diagnostic tests, and working within teams to perform medical procedures. Trainees will also acquire cultural competency tools essential to working with diverse patient populations. The clinical rotations further expose trainees to various sub-specialties in the field of medicine, enabling them to effectively take care of diverse patient cases across the lifespan.

6. **Faculty Quality and Number.** Four current faculty members will be involved with the physician assistant program. Three dedicated faculty administrators will be hired in the planning phase to comply with accreditation requirements. These include the program director, clinical coordinator, and medical director. They will be in place 15 months prior to seeking provisional accreditation. Two principal faculty who are trained as physician assistants will be hired nine months prior to seeking provisional accreditation. Two basic sciences faculty will also be hired when provisional accreditation is obtained, bringing the total number of new faculty hires to seven by year one of the program.

7. **Relevant Lower-level and Cognate Programs. Business Information Technology.** Several undergraduate programs at North Carolina A&T will be ideal pipelines for the physician assistant studies program. These include basic degrees in the health sciences (nursing, health services management, kinesiology), basic sciences, (biology, chemistry), and behavioral sciences (psychology). Students in these programs routinely complete the core requisites for the physician assistant studies program. More importantly, all these degree programs offer experiential learning opportunities, including undergraduate research that develop skills relevant for success in the physician assistant studies program. Master's level graduate programs in biology, chemistry, and health psychology will also serve as program pipelines.

8. **Availability of Campus Resources (library, space, etc.)**. The proposed program will be housed in the John R. and Kathy R. Hairston College of Health and Human Sciences. Students in the program will benefit from existing resources for programs that are closely aligned in subject content. These include biology, nursing, kinesiology, psychology, and health services management. North Carolina A&T plans to make a significant investment in library resources, including textbooks for the foundational and clinical specialty courses, supplemental instruction materials, and medical journals.

   For simulations and imaging labs, the program will use the Union Square Campus (USC) facility. The USC is two miles from the North Carolina A&T main campus and is jointly managed by North Carolina A&T, The University of North Carolina at Greensboro, Guilford County Community College, and Cone Health. The USC facility has state-of-the-art didactic training facilities dedicated to clinical programs, a cost-effective approach for delivering a world class clinical education to participating institutions.

9. **Existing Programs (Number, Location, Mode of Delivery).** There are two physician assistant programs within the UNC System, one at UNC-Chapel Hill and the other at ECU. Both are in-person delivery modes. The proposed program will fill a regional gap and serve to meet local needs for the central and western areas of the of North Carolina.

10. **Potential for Unnecessary Duplication.** Of the 17 UNC system institutions, only two offer physician assistant programs. These two programs have a large applicant pool and an acceptance rate of only five percent, indicating that the demand is not met. Furthermore, North Carolina A&T is in the central/western region of North Carolina, while both ECU and the UNC-Chapel Hill are in the eastern and research triangle regions, respectively.

11. **Feasibility of Collaborative Program**. Physician assistant training requires students to complete rotations at clinical sites and it will be necessary to collaborate with multiple healthcare providers to ensure the availability of training sites. Cone Health and other provider sites in Guilford,

Rockingham, and Alamance counties have agreed to collaborate with North Carolina A&T by serving as clinical sites and providing preceptors.

North Carolina A&T State also has a long history of collaborations with UNC-Chapel Hill. The UNC School of Medicine has clinics located in the suburbs of Greensboro. Program directors plan to pursue opportunities for clinical rotations with these clinics. Additionally, North Carolina A&T will consult with the existing programs at UNC-Chapel Hill and ECU to gain from their experiences regarding best practices.

12. **Other Considerations**. The proposed program will also integrate unique perspectives to equip graduates to effectively serve community health needs. The Hairston College of Health and Human Sciences houses degree programs for the health sciences and social and behavioral science majors. Recognizing the intersection of social, behavioral, and health sciences to the health and well-being of populations, faculty share their disciplinary expertise across degree programs. The proposed program will provide the educational experiences essential to providing culturally appropriate, population-based, and patient-centered care needed to reduce healthcare disparities and promote health equity.

III. Summary of Review Processes

1. **Campus Review Process and Feedback.** The proposal was reviewed by North Carolina A&T faculty senate, the graduate council, the graduate school, and administrators including dean and vice chancellor of the Graduate College, the interim dean of the Hairston College of Health and Human Sciences, the provost and chancellor.

2. **UNC System Office Review Process and Feedback.** Throughout the review process, North Carolina A&T provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

The recommendation is that the UNC Board of Governors approve North Carolina A&T's request to establish the Master of Science in Physician Assistant Studies (CIP 19.0101) effective fall 2024.

Request for Authorization to <u>Establish</u>
Master of Science (MS) in Supply Chain Management
CIP 52.0203
University of North Carolina Wilmington

I.   **Program Highlights**

- The University of North Carolina Wilmington proposes the establishment of a Master of Science (MS) in Supply Chain Management.
- This proposed program combines content and skills required by supply chain professionals, a fast-growing sector of the business ecosystem. The curriculum introduces students to leading supply chain management theory, application in the corporate environment, and impact on local and global market levels. Students will gain critical decision-making skills to better understand how industry practitioners use the decision-making process to accomplish corporate objectives.
- The program would support the university's mission of "creative inquiry, critical thinking …in areas of expertise that serve state needs." The program will focus on developing workforce relevant skills for each student.
- As a fully online program, the MS in Supply Chain Management is designed to be flexible and accessible to working professionals across North Carolina and the region. The program would be the only stand-alone MS in Supply Chain Management within the University of North Carolina System.
- Graduates will go on to careers in supply chain management, logistics, and related areas of the business ecosystem. They will also gain an understanding of strategic management that applies to companies with international operations.

II.   **Academic Program Planning Criteria (UNC Policy 400.1)**

1. **Relation to Campus Distinctiveness and Mission.** UNC Wilmington serves southeastern North Carolina and the state by providing a competitive set of workforce development options in an online format at a reasonable cost. The MS in Supply Chain Management complements existing programs for the business community, including the MBA, MS in Accountancy, MS in Business Analytics, MS in Finance and Investment Management, and MS in Computer Science and Information Systems.

2. **Student Demand.** Supply chain management is one of the fastest growing sectors in business leading to strong student demand. Recent studies and surveys show supply chain management related master's conferrals from institutions in the southeast region rose from 349 completions in 2015 to 491 completions in 2019, resulting in an 8.9 percent annualized growth rate. Notably, North Carolina institutions did not report conferrals in supply chain management/logistics fields in 2019. As the first stand-alone graduate degree program in supply chain management, this program will provide students with a cost-effective, online opportunity for a degree in the sector.

3. **Employment Opportunities for Graduates.** In North Carolina, supply chain management-related occupations are projected to grow at a combined rate of 8.5 percent between 2018 and 2028, on par with the projected average growth for all occupations in the state (8 percent). According to a 2021 survey conducted by the Association of Supply Chain Management (ASCM) of over 2,000 supply chain professionals, the median salary for professionals with an undergraduate degree is

$77,000, and the median salary for those with a graduate degree is $99,900. For in-state students, the potential salary increases of $22,900 exceeds this proposed program's list price. North Carolina employers are projected to add over 500 supply chain-related positions annually over the next 10 years.

4. **Impact on Access and Affordability**. The strong median salary for professionals with supply chain degrees contributes to the program's affordability. The MS in Supply Chain Management is similar in cost to the UNC Wilmington MBA and MS in business analytics, which are both very well subscribed and offered at competitive costs. Students pursuing master's degrees in business carry less student loan debt than the average across all fields ($18,200 vs. $23,800). The online program delivery format provides flexibility and access to students, including those with jobs and families, across the state and region.

   UNC Wilmington is requesting a tuition differential for this program. Tuition and fees for the 2022-23 full-time (12+/9+ credit hour) rates are as follows:

   Full-Time 2022-2023 Master's Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition	$4,719.00	$19,104.48
Tuition Differential	$5,100.12	$5,100.12
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	$2,690.51	$2,690.51
Special Fees	--	--

5. **Expected Quality.** The MS in Supply Chain Management is a fully online, 30-credit hour degree program. The program will benefit from a business advisory board of executives, directors, and managers from corporations such as Old Dominion Freight Lines, the State Ports, Mega Corps Logistics, and Wilmington Airport, among others. Internships are currently offered as an elective but may become mandatory as the program develops. The Cameron School of Business is accredited by the Association to Advance Collegiate Schools of Business (AACSB).

6. **Faculty Quality and Number.** There are currently seven full-time faculty in the Congdon School of Supply Chain Management, Business Analytics, and Information Systems. Three new faculty will be added over the next four years. Graduate faculty must hold a terminal degree and provide evidence of excellence in teaching and an ongoing record of scholarly work that is regularly evaluated (e.g., peer-reviewed) by regional, national, and international communities.

7. **Relevant Lower-level and Cognate Programs.** UNC Wilmington's undergraduate BS program in business administration is expected to be a source of students eligible for admission to the supply chain management master's program. The faculty who will teach in this new program currently teach courses in these undergraduate programs and the existing professional MBA and MS business analytics programs. Cameron School of Business added a new undergraduate concentration in supply chain management in 2017 to satisfy the demand for jobs in this area.

Over the past five years, there has been an increase in the number of students with a concentration in supply chain management in North Carolina and other states.

8. **Availability of Campus Resources (library, space, etc.)** Randall Library at UNC Wilmington currently supports graduate and undergraduate programs in the Congdon School, which includes an undergraduate major in supply chain management through a combination of print and electronic library holdings, including books, journals, and online databases. The Randall Library is also undergoing an extensive renovation and expansion that will offer students and faculty additional space and support for research data management, data visualization, 3-D modeling and prototyping, and other research assistance.

9. **Existing Programs (Number, Location, Mode of Delivery).** No institutions within the UNC System offer stand-alone online master's degrees in supply chain management or logistics. Five institutions provide supply chain management or logistics graduate and post-bac certificates: East Carolina University, North Carolina Agricultural and Technical State University, North Carolina State University, The University of North Carolina at Greensboro, and University of North Carolina at Charlotte. Additionally, UNC Wilmington and six North Carolina institutions offer an MBA with a supply chain management concentration: Appalachian State University, Fayetteville State University, North Carolina A&T State University, NC State, UNC Charlotte, and The University of North Carolina at Pembroke.

10. **Potential for Unnecessary Duplication.** This program would be the only stand-alone master's program in supply chain management. The program is specialized to meet supply chain professionals' needs, unlike the more generalized curriculum offered in MBA programs.

11. **Feasibility of Collaborative Program**. Collaboration among faculty and programs is encouraged. The online nature of the program presents opportunities for joint courses and shared enrollment across institutions as the program develops.

III.   Summary of Review Processes

1. **Campus Review Process and Feedback.** Various individuals and deliberative bodies reviewed and approved the program. This proposal originated with the Congdon School of Supply Chain, Business Analytics, and Information Systems faculty. It was reviewed by faculty and administration in the Cameron School of Business before being reviewed by UNC Wilmington's Graduate Council. Finally, the program was reviewed by leadership in the division of academic affairs, including the provost, assistant vice chancellor for academic affairs resource management, and UNC Wilmington's SACS liaison. The program proposal was reviewed and approved by the UNC Wilmington chancellor prior to submission to the UNC System Office.

2. **UNC System Office Review Process and Feedback.** Throughout the review process, UNC Wilmington provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV.   Recommendation

The recommendation is that the UNC Board of Governors approve UNC Wilmington's request to establish the Master of Science (MS) in Supply Chain Management (CIP 52.0203) effective spring 2023.