

**Request for Authorization to Establish
Bachelor of Science (BS) in Public Health
CIP 51.2207
Fayetteville State University**

I. Program Highlights

- Fayetteville State University proposes the establishment of a Bachelor of Science (BS) in Public Health, with concentrations in Community Health, Gerontology, and Parent and Child Health.
- FSU currently offers a BS degree in Health and Physical Education with a concentration in Community Health. The proposed degree will be housed in the Department of Health, Physical and Secondary Education (HPSE) in the College of Education (COE), effectively shifting from a concentration to a full degree program.
- Students who graduate from this program will have opportunities to work in state, county, and public health departments, healthcare facilities, non-government organizations, and not-for-profit organizations, schools and university, business, and industry health promotion programs.
- No other institution within the UNC System offers a gerontology concentration at the baccalaureate level. The concentration in gerontology is envisioned on the growing population of people over 65 years of age and whose well-being is becoming more dependent on care outside of conventional medical care facilities. A student of gerontology is a multi-discipline professional who examines aging from different perspectives, understands the process of aging and incorporates all aspects of healthful living (sociology, mental health, religion, education, recreation etc.) in caring for the elderly.
- The department of Health, Physical and Secondary Education at FSU has an established collaborative relationship with the School of Nursing and will continue that relationship as this degree moves forward.

II. Academic Program Planning Criteria (Section 400.1 of the UNC Policy Manual)

1. **Relation to Campus Distinctiveness and Mission.** This program enhances FSU's catalogue of degree program offerings not previously available to students and provides an alternative pathway for current FSU students who may decide not to pursue a degree in teaching Health and Physical Education, Nursing, Health Care Management, Sociology or Social Work but would like to remain at FSU and be credentialed in public health.
2. **Student Demand.** According to the UNC System's Student Data Dashboard enrollment in health professions and related programs increased 23 percent from 10,419 in fall 2016 to 12,772 in fall 2021.
3. **Employment Opportunities for Graduates.** As a result of the need for expanded services for Public Health, the health labor force is projected to increase by about 11-13 percent by 2028. The national mean annual wage for public health professionals in 2018 was approximately \$59,660. In North Carolina, it was \$57,300, and \$49,980 in Fayetteville with significant variations across industries (US Department of Labor, 2019).
4. **Impact on Access and Affordability.** As of fall 2021, FSU is included in NC Promise. NC Promise will help grow FSU's enrollment and strengthen its retention rate, while also making the cost of

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tuition more affordable for in-state students. Fall 2022 tuition rates for student and commuter students are listed below.

FSU is not requesting any program-specific fees or tuition differential for this program. Tuition and fees for the 2022-23 full-time (12+ credit hour/semester) rates are as follows:

Full-Time 2022-23 Undergraduate Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition	(NC Promise Tuition) 1000.00	(NC Promise Tuition) 5,000.00
Tuition Differential	--	--
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	4794.00	4794.00
Special Fees	--	--

- 5. Expected Quality.** The program consists of concentrations in Community Health and Gerontology. The program will consist of 120 credit hours (39 credit hours of university college core curriculum; 51 public health common core courses, 24 credit hours of concentration courses and six elective hours). The proposed program will seek accreditation for Standalone Baccalaureate Program (SBP) from CEPH, an independent, private, nonprofit corporation recognized by the U.S. Department of Education for public health program accreditation.
- 6. Faculty Quality and Number.** The faculty for this program currently teaching in the Health Education are sufficient for the undergraduate program.

It is expected that the Public Health program will be implemented with existing faculty in the College of Education (*Department of Health, Physical and Secondary Education*), Broadwell College of Business and Economics (*Department of Accounting, Finance, Healthcare Administration, and Information Systems*), and College of Humanities and Social Sciences (*Department of Sociology and Interdisciplinary Studies*). The Department of Health, Physical and Secondary Education (HPSE) consulted with the Broadwell College of Business and Economics and College of Humanities and Social Sciences throughout the planning process of this proposal and has established the adequacy of both faculty and physical resources for the implementation of the proposed program. Currently, the department has three faculty members with terminal degrees in health.

- 7. Relevant Lower-level and Cognate Programs.**
The department currently offers a BS degree in Health and Physical Education (HPE) with a concentration in Community Health. The designation of Community Health concentration within the Health and Physical Education program has not received a positive reaction from potential employers who seek to employ Public Health specialists. The HPE degree is viewed as a different discipline from community health or Public Health. In addition, the current program of study under HPE does not adequately prepare students with the necessary knowledge and skills to

function fully as public health specialists. This proposed program is designed to fully prepare students for career opportunities in Public Health.

- 8. Availability of Campus Resources (library, space, etc.)** The proposed program is not requesting any renovations or more space at this time. The current infrastructure in place is sufficient.

The new program will not have any immediate effect on existing information technology services. However, there may be a need for additional resources because of future increase in enrollment in the proposed program. Funding for any new equipment and facilities will be generated from university enrollment-driven sources as well as funding through faculty grant proposals. Chesnut Library's electronic resources and services are available 24 hours a day, seven days a week through the library's website. This includes 16,794 journals and 86,676 volumes of books that are directly subject specific to Nursing & Allied Health, Physical Sciences, Physical Education, and medical information. A total of 1,551,553 results can be retrieved through the library's online catalog when searching keyword "Nursing", including 668,651 full text peer reviewed journal articles, 3,952 eBooks, 2,306 print books, 1,147 journals, and 411 videos.

- 9. Existing Programs (Number, Location, Mode of Delivery).** Within the UNC System, there are currently four programs in Public Health: Appalachian State University (campus and online); East Carolina University (campus); University of North Carolina at Charlotte (campus); and University of North Carolina Wilmington (campus). Additionally, there are two programs in Public Health Education: North Carolina Central University (campus) and The University of North Carolina at Greensboro (campus and online). There is one program in Health and Wellness Promotion at University of North Carolina at Asheville (campus).

- 10. Potential for Unnecessary Duplication.** The proposed program is unique and distinct from those listed above because it will be the only program offering concentrations in Gerontology, Parent and Child Health, and Community Health. No institution within the UNC System offers gerontology at the baccalaureate level. Although three other UNC institutions (UNC Greensboro, UNC Wilmington, and ECU) offering a Community Health concentration, those programs serve and draw students from different geographical regions of the state. The University of North Carolina at Chapel Hill offers a masters level degree in maternal and child health.

- 11. Feasibility of Collaborative Program.** FSU consulted with other UNC System institutions with similar programs. Input was shared regarding syllabi review to ensure that course offerings are consistent with expected skill development and course learning outcomes as stipulated in the Eight Public Health Domains and Competencies. There are opportunities for FSU to share and link internship preceptors for students whose primary residence may be in counties of our sister institutions.

In preparation for this proposal, FSU has reached out to chairs and faculty of two sister institutions, ECU and NCCU, and have received verbal and written confirmation of their support for the establishment and willingness to assist in developing the program. Faculty from FSU have, in the past, collaborated and built relationships with faculty from these institutions. Further collaborative efforts, for mutual benefit, will include course cross-listing and cross-registration to facilitate efficient matriculation through the program. FSU will also collaborate with these institutions to solve or ameliorate regional public health problems through grant projects, health conferences and student/faculty exchange.

III. Summary of Review Processes

- 1. Campus Review Process and Feedback.** The academic proposal was reviewed by the FSU faculty, department, college, and university curriculum committees, the Faculty Senate, the provost, chief financial officer, and chancellor. Approval was obtained at all levels.
- 2. UNC System Office Review Process and Feedback.** Throughout the review process, Fayetteville State University provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

It is recommended that the Board of Governors approve the Fayetteville State University request to establish the Bachelor of Science (BS) in Public Health (CIP 51.2207, Public Health, General) effective fall 2022.

**Request for Authorization to Establish
Bachelor of Arts (BA) in Interdisciplinary Studies
CIP 30.0000
University of North Carolina at Charlotte**

I. Program Highlights

- The University of North Carolina at Charlotte proposes the establishment of a Bachelor of Arts (BA) in Interdisciplinary Studies.
- Through this face-to-face degree program, high-achieving students are provided the opportunity to combine a traditional disciplinary focus such as political science, economics, history, psychology, philosophy, and sociology among others with an additional minor that is not currently offered as a major. A student will design a unique, innovative degree by working with faculty and advising staff in the College of Liberal Arts and Sciences, to create a degree path that responds to a quickly evolving marketplace.
- Today's employers seek students with multiple skills, fields of expertise, and interests. The proposed degree in Interdisciplinary Studies provides students with a formal program of study that brings together two or more disciplines to explore broad topics. For example, organizational science is an excellent representation of a field that encompasses at least four disciplines-- psychology, communication, sociology, and management — to create a single, unique program of study. The proposed degree program in Interdisciplinary Studies provides students this prescriptive, well-defined pathway to a degree which spans two or more disciplines.
- UNC Charlotte has developed several specialized interdisciplinary minors to respond to student interests and employment market demand, as validated by a Hanover Research report. The proposed program provides the opportunity for students to choose from minors including Biotechnology, Cognitive Science, Health Psychology, Infrastructure and Environmental Systems, Organizational Science, Capitalism Studies, Legal Studies, Gerontology, Medical Humanities, Latin American Studies, Nanoscale Science, Data Science, Technology and Science, Sports Analytics, Southern Studies, or Urban studies to name a few options.
- Employment for graduates of interdisciplinary programs is reported in a variety of corporate, government, and non-profit jobs. The program also allows students to prepare for graduate study in many high-demand disciplines. Since the notion of interdisciplinary is central to the proposed program, faculty and advisors will mentor students to carefully select the pairing of a minor in a traditional arts and sciences discipline with another interdisciplinary minor (see above bullet) thus creating a unique major for the student.
- For example, a student could take a selected set of psychology courses and add a sports analytics minor to build an Interdisciplinary Studies degree in Psychology and Sports Analytics. This graduate may pursue job placement in the sports marketing industry. A student who combines a study of history with an interdisciplinary minor in capitalism studies may pursue job opportunities in banking relationship management which requires strong writing and communication skills with an understanding of business operations. A graduate who combines sociology and gerontology could pursue a career in government and public policy, or marketing. The combinations of disciplines make a UNC Charlotte Interdisciplinary Studies graduate more valuable because of this intersectionality between multiple areas of knowledge, skills, and abilities.

II. Academic Program Planning Criteria (Section 400.1 of the UNC Policy Manual)

1. **Relation to Campus Distinctiveness and Mission.** UNC Charlotte is committed to addressing economic, educational, environmental, health, and social needs of the greater Charlotte region. The proposed program draws from the strength of our existing programs allowing students to pursue opportunities not offered elsewhere in the region.
2. **Student Demand.** The proposed program responds to student interest and employment market demand, as validated by a Hanover Research report. We expect that the initial enrollment in the major will come from students in existing specialized interdisciplinary minors such as Capitalism Studies, Legal Studies, Biotechnology, and Medical Humanities.
3. **Employment Opportunities for Graduates.** Labor market research by Hanover Research concluded that students with the skills and capabilities developed in interdisciplinary programs are highly sought after by employers. Employment for graduates of interdisciplinary programs is reported in a variety of corporate, government, and non-profit jobs from analytics, communications, and economics to public administration. This program provides students with a flexible path to future study or employment, particularly in the business and medical professions. Because interdisciplinary programs cross boundaries of multiple areas and combine fields of study with the skill sets most requested by employers (critical thinking, written and oral communication, collaboration and teamwork) students broaden their educational experience and become key assets to today's employers. Interdisciplinary studies lie at the intersection of tradition and the future.
4. **Impact on Access and Affordability.** The average student loan of direct loans borrowed at UNC Charlotte in 2019-20 was \$19,121 for undergraduate students, which is nearly \$10,000 less than the national average for undergraduates of \$28,800. The proposed program allows students to create a program that uniquely fits their interests without extending the time to graduation and staying within 120 credits for a BA degree.

UNC Charlotte is not requesting any program-specific fees or tuition differential for this program. Tuition and fees for the 2022-23 academic year full-time (12+credit hour/semester) rates are as follows:

Full-Time 2022-23 Undergraduate Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition	3812.00	17,936.00
Tuition Differential	--	--
Mandatory Fees	3212.00	3212.00
Special Fees	--	--

5. **Expected Quality.** UNC Charlotte offers many existing minors that can serve as the focus of students' interdisciplinary studies in their proposed program. Drawing on the opportunities in the Charlotte region, students will also complete a senior capstone experience and relevant internships with industry, governmental agencies, or nonprofits to develop relevant in-demand skills in problem-solving, communication, and analysis in the context of specific areas of interest.

- 6. Faculty Quality and Number.** The faculty engaged in the proposed program are currently serving students in existing academic programs within the College of Liberal Arts & Sciences. A new lecturer position will be added in year two and an assistant professor position in year four. These new positions will facilitate the capstone experiences for students, continue to serve the broad undergraduate interest with elective offerings, and reduce dependence on adjunct faculty. Connections with faculty across academic units will provide the opportunity for greater collaborative research, and public service will be enhanced by the connections that the program will develop with outside entities as part of the work to establish internship opportunities for students.
- 7. Relevant Lower-level and Cognate Programs.** The proposed program will be supported by coursework in History, English, Sociology, Psychological Science, Religious Studies, Communication Studies, Africana Studies, Economics, Biological Sciences, and Data Science among others.
- 8. Availability of Campus Resources (library, space, etc.)** As there are no new courses planned for this proposed program, existing campus physical spaces and infrastructure are sufficient to support the program. The campus library has an expansive set of databases in the proposed area of study. Journal articles and books that are not held by the library can be obtained at other libraries in the state and region through Interlibrary Loan. Specialized facilities are not required for the program, and space for the unit that will direct the major has been identified in the Fretwell building.
- 9. Existing Programs (Number, Location, Mode of Delivery).** There are currently four existing undergraduate interdisciplinary degrees within the UNC System: University of North Carolina Wilmington, The University of North Carolina at Pembroke, Elizabeth City State University, and East Carolina University. The ECSU program is fully online.
- 10. Potential for Unnecessary Duplication.** The proposed program is intended for residential students, granting them the opportunity to build a major that includes structured programming from all of the colleges, including the professional colleges, and is designed to permit flexibility in major selection for UNC Charlotte undergraduates. It is aligned with the economic sectors in Charlotte, draws on existing specialized minors that only exist at UNC Charlotte (e.g., Capitalism Studies), and takes advantage of internship opportunities in this region of the state.

The other existing Interdisciplinary Studies programs within the UNC System differ from the proposed program either in target audience (UNC Wilmington, UNC Pembroke) focus areas (UNC Wilmington, UNC Pembroke, ECU) or delivery method (ECSU). The unique feature of the program is that it is built around specific interdisciplinary programs while allowing students to gain depth in disciplinary content and methodology.

- 11. Feasibility of Collaborative Program.** Interdisciplinary Studies is a face-to-face program built on opportunities in relevant industry sectors in the Charlotte area; open to collaboration should opportunities arise, particularly in areas like biotechnology. Capstone or internship experiences at the North Carolina Research Campus would be examples of collaborative opportunities with other campuses.

III. Summary of Review Processes

- 1. Campus Review Process and Feedback.** The proposed program was reviewed and approved by the Dean of the College of Liberal Arts & Sciences, the Undergraduate College and Curriculum Committee, Faculty Council, chief financial officer, provost, and chancellor.
- 2. UNC System Office Review Process and Feedback.** Throughout the review process, UNC Charlotte provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements.

IV. Recommendation

It is recommended that the Board of Governors approve the University of North Carolina at Charlotte request to establish the Bachelor of Arts (BA) in Interdisciplinary Studies (CIP 30.0000) effective fall 2022.

**Request for Authorization to Establish
Bachelor of Science in Economic Analysis (ECON)
CIP 45.0602
Western Carolina University**

I. Program Highlights

- Western Carolina University proposes the establishment of a Bachelor of Science in Economic Analysis.
- There is no existing economics degree currently offered by WCU. The Economic Analysis degree will open career paths not currently available to WCU graduates, taking advantage of the market move toward data analytics and econometrics. Graduates of the program will leave with greater economic literacy, a deeper understanding of markets, an enhanced opportunity for high-earning data-driven employment options or will continue on to graduate school.
- Students will gain a greater insight into how to analyze regulation, business decisions, and government policy. The degree will prepare students for a variety of careers by requiring students to complete non-economics courses from four interdisciplinary areas: (1) analytical and quantitative, (2) behavior, (3) history of thought, or (4) policy. Currently, WCU graduates do not have the necessary pre-requisites to enter directly into master's and Ph.D. economics programs offered within the UNC System; this degree will enable WCU students to further their economics studies within the UNC System and beyond. The degree will also increase retention of students from the area instead of losing them to nearby institutions that offer economics degrees.
- Economic Analysis graduates will have greater economic literacy, deeper understanding of markets, and will earn more and owe less because they will be well prepared for many occupations and careers. The national average of median earnings for economic graduates one year after graduation is \$48,828 or the 82nd percentile nationally (College Scorecard 2021.). The national average median of debt for economics graduates is \$22,283 or the 7.4 percentile (College Scorecard 2021). Recent economic degree graduates have a debt-to-earnings ratio of 0.46. This places them at the 9.7th percentile.

II. Academic Program Planning Criteria (Section 400.1 of the UNC Policy Manual)

1. **Relation to Campus Distinctiveness and Mission.** Many community partners and policy organizations often seek students who might be able to help them with their economic research or analysis. Unfortunately, few WCU students have developed the skills required to perform economic analyses and research. With this degree, more WCU students will be prepared to assist WCU's regional, state, and national community partners. Adding an Economic Analysis degree will enable WCU students to pursue additional opportunities that enhance their earnings and employment opportunities relative to the ones that were available to their parents. WCU ranks 282nd out of 369 selective public colleges in terms of income mobility. Compared to WCU's national peer institutions, WCU students have the next to lowest income mobility.
2. **Student Demand.** Between 2006 and 2020 WCU witnessed an increase in the number of Economics minors: from 24 to 48. Between spring of 2019 and 2021, five students have designed their own interdisciplinary economics degrees. Three more students have begun the applications process to design an interdisciplinary economics degree. In the spring of 2018, students in the

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International Trade class were surveyed, and two-thirds of the class stated they would have majored in economics if it was offered by WCU.

3. **Employment Opportunities for Graduates.** Economic Analysis graduates will be well-prepared for many occupations and careers. For example, all four who have graduated with their self-designed interdisciplinary economics degree were offered jobs within four months of graduation. These include positions such as a financial analyst and data visualization specialist.
4. **Impact on Access and Affordability.** The national average of median earnings for economic graduates one year after graduation is \$48,828 (College Scorecard 2021). These earnings place recent economic degree graduates at the 82nd percentile nationally. The national average median of debt for economics graduates is at the 7.4 percentile. Recent economics bachelor's holders have an average median debt lower than nine out of 10 recent bachelor's degree holders. Recent Economic degree graduates have a debt-to-earnings ratio of 0.46, at the 9.7th percentile, lower than nine out of 10 bachelor's degree graduates.

WCU is not requesting any program-specific fees or tuition differential for this program. Tuition and fees for the 2022-23 academic year full-time (12+ credit hour/semester) rates are as follows:

Full-Time 2022-23 Undergraduate Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition	\$1,000.00	\$5,000.00
Tuition Differential	--	--
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	\$5,983.80	\$5,983.80
Special Fees	--	--

5. **Expected Quality.** The BS in Economic Analysis will be accredited by AACSB. All six faculty have Ph.Ds. and are experienced at mentoring students. Because the College of Business is AACSB accredited, the BS in Economic Analysis will be assessed similarly to other degree programs in the College of Business under the planned 5- and 10-year AACSB assessment plans.
6. **Faculty Quality and Number.** WCU's economics faculty were recently ranked as the 13th best in terms of research quality at regional universities in the South. All six full-time faculty hold Ph.D.'s in Economics or Applied Economics. All adjuncts hold Master's degrees. If the program remains at 50 or fewer students, there will be no need for additional resources.
7. **Relevant Lower-level and Cognate Programs.** Economics faculty serve degree programs in Business, Natural Resource Management, Mathematics, and International Studies. Therefore, the Economics program already offers introductory, and field courses that are part of the degree proposal.

8. **Availability of Campus Resources (library, space, etc.)** All physical space and infrastructure is sufficient to support an Economics Analysis degree with 50 or fewer students. No additional library resources are required to support the program.
9. **Existing Programs (Number, Location, Mode of Delivery).** No UNC System Institution offers CIP 45.0602: Applied Economics at the Bachelor level. Sixteen related economics programs are offered at 10 UNC System campuses.
10. **Potential for Unnecessary Duplication.** This will be the only applied economics degree (CIP 45.0602) in the UNC System. Students will gain a greater insight into how to analyze regulation, business decisions, and government policy. Unlike other economics degree programs in the UNC System, the proposed Economic Analysis curriculum will prepare students for a variety of careers by requiring students to complete non-economics courses from four Interdisciplinary Areas: analytical and quantitative, behavior, history of thought, or policy.
11. **Feasibility of Collaborative Program.** The Economic Analysis degree will be delivered in-person. However, we can envision students enrolling in virtual classes offered by UNC System schools.

III. Summary of Review Processes

1. **Campus Review Process and Feedback.** The proposal documents have been reviewed and approved by the: Economics faculty, department chairs of Psychology, History, Mathematics & Computer Science, Anthropology & Sociology, and Philosophy & Religion Department, College and University Curriculum Committees, University Academic Policy Review Council (Subcommittee of the Faculty Senate), Faculty Senate, dean of College of Business, dean of Arts & Sciences, dean of College of Education and Allied Professions, chief financial officer, and the provost.
2. **UNC System Office Review Process and Feedback.** Throughout the review process, WCU provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

It is recommended that the Board of Governors approve Western Carolina University's request to establish the Bachelor of Science (BS) in Economic Analysis (CIP 45.0602) effective fall 2022.

**Request for Authorization to Establish
Master of Science (MSOT) in Occupational Therapy
CIP 51.2306
Appalachian State University**

I. Program Highlights

- Appalachian State University proposes the establishment of a Master of Science in Occupational Therapy.
- The proposed program aligns with the Appalachian State mission by addressing the critical lack of occupational therapists needed to improve the health, quality of life, and ability to work and live independently for an underserved population in the region.
- This program is important because there are no public university graduate degree programs for occupational therapy in western North Carolina and there is a dearth of services available to those in need of occupational therapy. The purpose of the program is to prepare students in western North Carolina to become certified occupational therapists.
- Graduates will be able to immediately start serving patients and clients with disorders ranging from autism and other developmental disabilities to individuals suffering strokes and dementia, in a variety of settings including hospitals, rehabilitation centers, skilled nursing facilities, home health, schools, and private practices.

II. Academic Program Planning Criteria (Section 400.1 of the UNC Policy Manual)

- 1. Relation to Campus Distinctiveness and Mission.** The Beaver College of Health Sciences at Appalachian was established to improve health and wellness in Western North Carolina and beyond by educating the student workforce. Occupational therapy (OT) is one of the greatest needs throughout the state, especially in the western part of the state. Occupational therapists work to improve functional abilities in people of all ages from birth to the end of life. Beaver College has a focus on interprofessional education, and OT is a critical missing component to the training programs offered for working with older adults, individuals with autism, and more.
- 2. Student Demand.** Students apply in large numbers to OT programs throughout the country and in North Carolina, and the vast majority are turned away due to constraints on program numbers. The University of North Carolina at Chapel Hill accepts less than 25 out of its approximately 225 applicants. Winston-Salem State University had over 300 applicants for less than 30 spots. Lenoir Rhyne had over 400 applicants last year. Students are being turned away even though the job openings throughout the state cannot be filled by current graduating OTs. A survey of Appalachian students indicated that 86 percent of more than 250 respondents would apply for admission to an OT graduate program at Appalachian. It is a popular profession (among the top 10 in most polls), and students are seeking spots in graduate schools.
- 3. Employment Opportunities for Graduates.** Occupational Therapy is among the top 10 professions in most employment polls, and jobs are abundant. Despite this, there are not enough programs to provide OTs to fill the jobs. Currently, there are approximately 500 openings for OTs in the state alone.

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- 4. Impact on Access and Affordability.** Appalachian State will provide a cost-effective graduate degree that will allow students without any background in OT to graduate within six semesters and become a practicing OT with very little debt. Tuition and fees are listed in the table below. The program will request a tuition differential of \$100 per credit hour due to the expenses required for clinical training programs, which are standard practice to meet accreditation requirements. The total costs of tuition and fees for the entire MOST program is approximately \$28,000 per student. Tuition and fees for the 2022-23 full-time (12+/9+ credit hour) rates are as follows:

Full-Time 2022-23 Master’s Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition	4,839	19,849
Tuition Differential	2,900	2,900
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	3,047	3,047
Special Fees	--	--

- 5. Expected Quality.** The proposed MSOT will meet the rigorous accreditation requirements of the American Council for Occupational Therapy Education (ACOTE), as dictated by their process, providing a 66-credit hour degree. The program will cover all target areas of study and provide two levels of field experiences. All students will have to pass the ACOTE accreditation examination to complete the degree program and become practicing OTs.
- 6. Faculty Quality and Number.** A total of six faculty will be hired for this degree program: three tenure-track and three clinical faculty. Additional adjunct faculty will be recruited from the community for specific courses, and some faculty in existing departments will provide additional lectures in specific areas. The ACOTE has stringent requirements on faculty hires: half of core faculty are required to have doctoral degrees with defined research expertise.
- 7. Relevant Lower-level and Cognate Programs.** This program will exist within the new Department of Rehabilitation Sciences along with graduate programs in speech pathology and athletic training. Faculty in both programs have some overlapping areas of expertise and will provide educational support for the occupational therapy program. This will mostly occur in interprofessional education and clinical training opportunities. Additionally, the undergraduate exercise science curriculum is designed to prepare students for graduate school and careers in OT, PT, and medicine providing a strong feeder for students into the new OT degree program.
- 8. Availability of Campus Resources (library, space, etc.)** No additional space is needed. Space for the OT program was allocated in Levine Hall before it was constructed. This includes an OT lab, classroom space, space in our Interprofessional Clinic, and office and administrative space. Some equipment will need to be purchased, but donations are currently helping to defray costs.
- 9. Existing Programs (Number, Location, Mode of Delivery)** Currently, the state of North Carolina has three public universities with a comprehensive entry level clinical degree in OT (ECU, UNC-

Chapel Hill, Winston-Salem State). These three programs produce approximately 70-80 graduates per year in total. Given that North Carolina is the ninth most populous state in the country, this number of graduates per year cannot meet current and future employment opportunities in the state—particularly in western North Carolina.

10. Potential for Unnecessary Duplication. The proposed MSOT program will be the only UNC System program in western North Carolina. Currently, Lenoir Rhyne, a private institution, is the only institution west of I-77 that offers an entry-level OT program.

11. Feasibility of Collaborative Program. Appalachian has had ongoing conversations with The University of North Carolina at Pembroke regarding collaborations as they develop their OT program. UNC Pembroke is also proposing a six-semester program with similar fieldwork experience timelines. Though specific areas of collaboration are yet to be determined, possibilities discussed include: 1) sharing faculty with complementary areas of expertise, 2) collaboration on required student research experiences, 3) collaboration with interprofessional learning activities, 4) sharing clinical opportunities and 5) continuing education or special programs/conferences. Early discussions are also underway with Winston-Salem State and will continue in the coming year.

III. Summary of Review Processes

- 1. Campus Review Process and Feedback** The proposal was reviewed by relevant faculty and staff at Appalachian, the head of the faculty senate and the head of the graduate council, the dean of the Cratis D. Williams School of Graduate Studies, the provost, and the chancellor. Support was provided at all levels.
- 2. UNC System Office Review Process and Feedback.** Throughout the review process, Appalachian provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

It is recommended that the Board of Governors approve Appalachian State University's request to establish the Master of Science in Occupational Therapy (CIP 51.2306) effective fall 2024.

**Request for Authorization to Establish
Doctor of Occupational Therapy (OTD)
CIP 51.2306
East Carolina University**

I. Program Highlights

- East Carolina University (ECU) proposes the establishment of a Doctor of Occupational Therapy (OTD).
- The purpose of the proposed program is to meet strong student and professional demand, further interprofessional collaboration in health care education and advance the ECU mission by enhancing institutional competitiveness. Currently, ECU offers a Master of Science in Occupational Therapy. The approval of the proposed program adds continuity in professional education for students seeking a Doctor of Occupational Therapy option.
- The proposed OTD program includes a capstone experience which requires students to complete an additional project and 14-week experience typically aligned with a community partner. The proposed program would help further ECU's commitment to public health and regional transformation.
- The OTD degree is not available to students in North Carolina at a public university. There are multiple private programs offering it which potentially drives up student debt. The occupational therapy profession is in high demand and continues to be ranked in the top 10 by *US News & World Report Best Health Care Jobs*.
- Program graduates will be eligible to sit for the National Certification in Occupational Therapy test allowing them to get a license to practice occupational therapy in any state in the US. It will also provide program graduates with advanced skills above the master's degree that will contribute to their leadership, advocacy, and entrepreneurship skills.

II. Academic Program Planning Criteria (Section 400.1 of the UNC Policy Manual)

- 1. Relation to Campus Distinctiveness and Mission.** The mission of the Department of Occupational Therapy (OTD) is to develop occupational therapists who: 1) understand the power of meaningful occupations and use occupational engagement with clients across all contexts to enhance their quality of life, improve their health and well-being and reduce health disparities, 2) exhibit leadership in the delivery of collaborative and high-quality services, 3) use innovative and evidence-based approaches to transform the region and beyond. Key objectives of the OTD program are to 1) meet the societal and student demand through the development of an affordable clinical OTD (leading to licensure) within a North Carolina public institution, 2) provide additional leadership skill development and advocacy, 3) further the mission of ECU through the addition of a capstone experience, and 4) obtain a license to practice occupational therapy.
- 2. Student Demand.** The proposed program is a clinical professional degree leading to licensure at the doctoral level. ECU currently has a clinical professional degree leading to licensure at the master's level. Both degrees lead to the same license in the same profession. Occupational therapists continue to be in high demand. Over the last 10 years, the demand for occupational therapy programs, along with the number of applicants across the country, has risen significantly. Continued top rankings by *US News & World Report* as one of the 2021 "Best Health Care Jobs" at #10 (up from #11 in 2019) and *US News & World Report 2021 "100 Best Jobs"* (#19) have contributed to this increase in the applicant pool. Over the past several years ECU collected data from prospective students showing a strong

APPENDIX L

interest in both degree paths which supports its plan to have 18 students in the MSOT track and eight in the OTD.

3. **Employment Opportunities for Graduates.** The program’s capstone experience and project help students develop entrepreneurial skills and will equip them to be innovative with job opportunities. In addition, there continues to be a significant shortage in occupational therapy faculty across the country. Graduates with an OTD have the credentials to comprise up to 50 percent of the faculty in an OTD clinical degree program. Students with the master’s level degree are unable to be core faculty members. OTD graduates are needed to sustain the profession, support program growth, and address the number of faculty retirements, which is a critical need within the profession.
4. **Impact on Access and Affordability.** In consideration of student debt to income ratio, it is important to recognize that the OTD at ECU will be approximately one-third of the cost of any other OTD in the state, because all other OTDs are at private institutions. No other clinical OTD degrees leading to licensure are currently being considered at the state level for the public institutions nor are in the accreditation cue for consideration. Students seeking an OTD are going to find an institution that offers it. The lack of program availability at NC public institutions may potentially drive students out of state and to more expensive programs, leading to a much higher debt to income ratio.

ECU is requesting a tuition differential for this program. A tuition differential exists for the master’s degree program. Proposed fees will represent a slight increase over the current one. Notably, this graduate program has required components in fall, spring, and summer semesters so the totals presented are for all three terms which would be one academic year. These rates are based on the 2021-22 tuition and fee schedule. Tuition and fees for the 2022-23 full-time (9+ credit hour) rates are as follows.

Full-Time 2022-23 Doctoral Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition (FALL, SPRING, SUMMER)	FALL 2,374.47 SPRING 2,374.47 SUMMER 2,505.50	FALL 8,948.97 SPRING 8,948.97 SUMMER 9,665.81
Tuition Differential (100/credit)	3,700	3,700
Mandatory Fees (Athletics, Student Activities, Health Services, Educational & Technology, Campus Security, Debt Service, ASG)	FALL 1,351.00 SPRING 1,351.00 SUMMER 1,277.43	FALL 1,351.00 SPRING 1,351.00 SUMMER 1,277.43
Special Fees	0	0
TOTAL COST FIRST YEAR	15,113.87	35,243.18

5. **Expected Quality.** ECU has over 40 years of experience offering a high quality, accredited occupational therapy degree leading to professional licensure. This proposal will maintain a high-quality master’s degree option (MSOT) while also offering the OTD option. Students who are in the OTD program will have additional opportunities and support to develop leadership skills that will help prepare them for their capstone experience and project which is the culminating experience. This capstone experience is in addition to the research project that students are involved in earlier in the program. The purpose of this experience and project is to provide in-depth exposure to one or more area such as clinical practice skills, research skills, administration, leadership, program and policy development, advocacy, education, or theory development as appropriate. The skills developed throughout this process will

help OTD graduates be innovators and entrepreneurs as they use their skills to serve the region during the program and then after graduation if they desire to be an entrepreneur and create a position in an emerging area of practice. Graduates will have more innovation and application opportunities to address various public health issues locally, regionally, state-wide, and nationally. Expected benefits for students who graduate with an OTD include more diverse job opportunities especially in areas of innovation and enhanced leadership opportunities.

- 6. Faculty Quality and Number.** The faculty lines that exist for the current MSOT program include eight FTE. One FTE of the eight also serves as the chair. Seven of these positions are tenure-track faculty positions, and one is a fixed-term clinical faculty position. All current faculty will be involved in teaching the OTD program as well as the existing MSOT program. Currently, the seven faculty have a cumulative total of 75+ years of experience teaching full-time graduate occupational therapy education. ECU is currently hiring for open position. In addition, one FTE will be added at the beginning of the program for the capstone coordinator position required by accreditation. If numbers of OTD students increases from eight per cohort to 10 per cohort in year three, another 1 FTE will be required to assist with capstone preparation seminar courses, supervision of capstone projects which is supported by external review feedback.
- 7. Relevant Lower-level and Cognate Programs.** This program does not require a specific major or concentration if the prerequisite requirements are fulfilled before beginning the program. However, ECU does have an existing relationship with the ECU Honors College where current students within the Honors College interested in occupational therapy for graduate school can apply for an early admission into the program. In addition, occupational therapy faculty serve as mentors for honors college senior projects at times.
- 8. Availability of Campus Resources (library, space, etc.)** No additional campus resources are needed since ECU has an existing occupational therapy program. Library resources support both the MSOT and proposed OTD program with journals through subscriptions and interlibrary loan, textbooks, computer lab, virtual reality lab, and various medical models. The program currently has four lab classrooms and one research lab. HSB 3325 is a learning lab designed for the full class. It has equipment for group-based learning activities, equipment for splinting labs, and a small kitchen for class-based activities on activities of daily living. HSB 3345 is a lab space with three fixed and two hydraulic mat tables for practicing transfers, bed mobility, and other musculoskeletal assessment and treatments. Students of the program also have access to information technology and support services through the nearby student center.
- 9. Existing Programs (Number, Location, Mode of Delivery).** There are no degree programs in occupational therapy at the doctoral level within the UNC system, only at the private institutions. In the UNC System, there are two similar programs offered at the master's degree level. The MSOT is offered at Winston-Salem State University, the University of North Carolina at Chapel Hill, and is in development at Appalachian State University. UNC-Chapel Hill offers a Ph.D. in Occupational Science, but this research degree does not train students to become occupational therapists nor lead to professional licensure. Therefore, the UNC-Chapel Hill Ph.D. is designed for a different population of students than the professionally-oriented OTD.
- 10. Potential for Unnecessary Duplication.** ECU's OTD is distinct from existing programs. It will be the first in the state at a public institution. It is also unique because it is the only program in the state

(including private institutions) that will offer an option of completing a master's degree or doctoral degree, both that lead to licensure as an occupational therapist.

11. Feasibility of Collaborative Program. Discussions have occurred with other program directors of occupational therapy programs (both masters and doctoral level) about collaborating on research, intra-professional group activities, and guest lecture opportunities. A committee of all program directors at the occupational therapy and occupational therapy assistant schools in the state has been formed to brainstorm collaborative opportunities and to act. This committee meets two times per year at the state occupational therapy association conferences but has not been able to meet recently due to conference cancellations or modifications because of COVID-19.

12. Other Considerations. It is important that this proposal is reviewed during spring 2022 as the deadline for ECU to submit the next step to its OTD accreditation is August 2022. The national accrediting body limits the number of OTD programs allowed to open across the country. Absent program approval, ECU will miss this deadline and may have to wait two-three years for resubmission.

III. Summary of Review Processes

1. Campus Review Process and Feedback. A concept paper outlining the program was developed and approved by the Academic Council. A program proposal, including curriculum, was subsequently created, and approved by the department, college graduate curriculum committee, college dean, academic program development collaborative team, graduate council, educational policies and planning committee, faculty senate, academic council, and chancellor.

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

IV. Recommendation

It is recommended that the Board of Governors approve East Carolina University's request to establish the Doctor of Occupational Therapy (CIP 51.2306) effective fall 2023.

**Request for Authorization to Establish
Doctor of Philosophy (Ph.D.) in Pharmaceutical Chemistry
CIP 51.2004
University of North Carolina Wilmington**

I. Program Highlights

- The University of North Carolina Wilmington (UNCW) proposes the establishment of a Doctor of Philosophy (Ph.D.) in Pharmaceutical Chemistry.
- The purpose of the proposed program is to provide in-depth training in pharmaceutical and medicinal chemistry that fosters the discovery and development of novel therapeutic agents, efficient and scalable processes related to synthesis and manufacture, and robust testing frameworks for effectiveness and toxicological purposes.
- North Carolina, and southeastern North Carolina in particular, have a growing pharmaceutical industry that will benefit from doctorally prepared scientists and a strong university partner for joint ventures.
- UNCW's proposed Ph.D. in Pharmaceutical Chemistry builds on successful undergraduate and graduate programs, including one of the largest ACS accredited undergraduate chemistry programs in the nation and a successful research-based master's program that includes a concentration in Pharmaceutical Chemistry. The program also leverages over 20 years of research in natural products chemistry and drug discovery, public-private partnerships, and translational research facilitated by the Marine Biotechnology in North Carolina (MARBIONC) program.
- Graduates from the proposed Ph.D. in Pharmaceutical Chemistry will be well suited for positions in academia, as well as in the private sector serving as contributing scientists and project leads for pharmaceutical companies and related industries (e.g., clinical research).

II. Academic Program Planning Criteria (Section 400.1 of the UNC Policy Manual)

1. **Relation to Campus Distinctiveness and Mission.** The proposed Ph.D. in Pharmaceutical Chemistry would be the university's sixth doctoral program. As with UNCW's other doctoral programs, the Ph.D. in Pharmaceutical Chemistry is tied to regional and state needs and leverages significant faculty expertise, a long history of research in the field, and prior investments in related research infrastructure. Southeastern North Carolina is among the fastest growing regions in the country and is intimately tied economically and culturally to the coast. The Ph.D. in Pharmaceutical Chemistry builds on decades of expertise in marine natural products chemistry (e.g., drugs from the sea) and public private partnerships in marine biotechnology. This degree program helps to meet the workforce needs of Southeastern North Carolina's growing pharmaceutical industry and produces capable scientists employable in both academia and private industry.
2. **Student Demand.** UNCW's projections of enrollment and demand have been informed primarily by a market analysis by Hanover Research, Inc., as well as conversations with the University of North Carolina at Chapel Hill's Eshelman School of Pharmacy, The University of North Carolina at Greensboro — which offers one of the newer Chemistry Ph.D. programs in the state — and North Carolina Central University, which has a Pharmaceutical Sciences Department. Hanover Research, Inc. described national trends indicating a growing market for doctoral degrees in the

Pharmaceutical Sciences. According to the Hanover report, occupational projections and salary data indicate strong opportunities for pharmaceutical sciences graduates and faster than average growth for medical scientists in North Carolina. Because there are few doctoral options in pharmaceutical sciences in the state, the program fills a key gap in the training available for students in North Carolina and beyond. For example, the UNC-Chapel Hill Pharmaceutical Sciences Chemical Biology and Medicinal Chemistry Division typically receives 80 applicants per year but only admits 10 students. Similar excess demand is reported by aligned programs at UNC Greensboro and NCCU. In addition, over the past 10 years, over 25 students from UNCW have gone on to pursue Ph.D. degrees at other universities, many related to the pharmaceutical sciences.

- 3. Employment Opportunities for Graduates.** A report by Hanover revealed that occupational projections and salary data indicate strong opportunities for pharmaceutical sciences graduates. Projections indicate faster than average growth for medical scientists in North Carolina. Based on a 2017 American Association of Pharmaceutical Sciences (AAPS) survey, Ph.D. graduates earn around \$160,000 per year. The pharmaceutical industry represents a strong and growing economic and workforce sector with overall sales and industry R&D spending increasing since 2008, and projections indicate continued growth. The analytical, biochemical, and organic chemistry skills obtained in this program are versatile and mobile providing opportunities for employment both inside and outside NC.
- 4. Impact on Access and Affordability.** The Pharmaceutical Chemistry doctorate provides training suitable for careers inside and outside of academia. Students will apply their work directly to societal and commercial problems, and we anticipate that this focus will result in greater mobility of recent Ph.D.'s toward private sector employment, an increase in pharmaceutical businesses and jobs, and an increase in licensed technologies resulting from related IP.

Nationally, about 14 percent of doctoral students (compared to 44 percent of all graduate students) take loans to pay for their degree program, and those students carry an average of \$12,600 in debt (compared to \$23,800 for graduate student, National Center for Education Statistics). Because students in this program will be supported with research and teaching assistantships and tuition scholarships, the impact on student debt is expected to be minimal.

UNCW is not requesting any program-specific fees or tuition differential for this program. Tuition and fees for the 2022-23 full-time (9+ credit hour) rates are as follows:

Full-Time 2022-23 Doctoral Tuition and Fees per Year (In Dollars)

Category	Resident	Non-Resident
Tuition	\$4,719.06	\$19,104
Tuition Differential	--	--
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 Pharmaceutical Chemistry Ph.D. requires a total of 60 credits post-baccalaureate, including 40 credits post Masters. Students will engage in doctoral level research including development and presentation of a research prospectus and completion and defense of a written dissertation. The resulting dissertation is envisioned as a traditional multi-chapter research dissertation, reporting novel discoveries in the pharmaceutical chemistry. The student is advised by a committee of five members including at least one member of the committee from outside the student's primary discipline.
6. **Faculty Quality and Number.** The proposed Ph.D. program in Pharmaceutical Chemistry will be administered in the Department of Chemistry & Biochemistry, with more than 20 members in fields related to pharmaceutical chemistry, and two Distinguished Professors specifically hired in support of the program. The program also benefits from expertise in several other departments such as Biology and Marine Biology, Psychology, Clinical Research.
7. **Relevant Lower-level and Cognate Programs.** The Ph.D. in Pharmaceutical Chemistry leverages an existing ACS accredited B.S. program and related BA program that support ~200 Chemistry majors. Additionally, the M.S. Chemistry includes a concentration in Pharmaceutical Chemistry. The department is among the top producers of undergraduate and graduate degrees, ranking in the top 25 among ACS-certified BS graduates and in the top 5 percent nationwide in the number of MS graduates. UNCW has produced the third most chemistry majors in North Carolina since 2006.
8. **Availability of Campus Resources (library, space, etc.).** All existing facilities and services are in place to support the Ph.D. in Pharmaceutical Chemistry. The program will be supported by excellent facilities that span over 160,000 ft² on both the main campus and the nearby Myrtle Grove campus. On the main campus, facilities are available in the fully remodeled Dobo Hall and the new Veteran's Hall, including dedicated research space, shared instrumentation space, a tissue culture facility, a dark room for house sensitive optical equipment, NMR facility, advanced microscopy capabilities (TEM, SEM, confocal), and shared resources for molecular biology and genetics. The program will also benefit from UNCW's Center for Innovation and Entrepreneurship (CIE), which nurtures emerging companies and works to accelerate the entrepreneurial ecosystem in southeastern North Carolina. The center offers programming and mentoring to help grow entrepreneurs and small businesses, and its facility includes co-working and business incubation space.
9. **Existing Programs (Number, Location, Mode of Delivery).** Two similar programs exist within the UNC System. The first is the Ph.D. in Pharmaceutical Chemistry, housed in the Chemical Biology and Medicinal Chemistry Division at UNC-Chapel Hill. The second program is the Ph.D. in Integrated Biosciences, Pharmaceutical Sciences Concentration, offered at NCCU.
10. **Potential for Unnecessary Duplication.** The Ph.D. program in Pharmaceutical Chemistry is designed to avoid redundancy with other programs in the state and elsewhere in the US. The overall curriculum for this program prepares students for a flexible career in Pharmaceutical Chemistry and the UNCW faculty will enable this goal by offering a broad range of Pharmaceutical Chemistry research foci, from traditional and non-traditional drug discovery and medicinal chemistry to formulation of therapeutic antibodies. Apart from finding employment in the pharmaceutical industry, the graduates of the proposed program would be ideally positioned

nationally to work in the rapidly expanding contract research organization and biotechnology sectors, pursue academic careers, or establish their own innovative start-up companies.

- 11. Feasibility of Collaborative Program.** Active research collaborations are already underway with UNC-Chapel Hill and support staff. In addition, the UNCW Drug Discovery program makes consistent use of the analytical facilities available at UNC-Chapel Hill and has become a primary user of the NMR facility. Other current partnerships with UNC-Chapel Hill faculty include the development of a pilot summer short course on Advanced NMR Methods on the UNCW campus with more than 50 participants from across UNCW. Strong collaborations at UNCG in natural products drug discovery, UNCP in biological assay development, and ECU in immunotoxicity are also underway and provide additional avenues for student interaction.
- 12. Other Considerations.** The Ph.D. in Pharmaceutical Chemistry at UNCW benefits from a significant philanthropic grant which supports two distinguished professorships associated with the program, as well as student and research needs.

III. Summary of Review Processes

- 1. Campus Review Process and Feedback.** The proposal was reviewed and approved by the Department of Chemistry and Biochemistry Faculty, Department of Chemistry and Biochemistry Graduate Coordinator, the Department of Chemistry and Biochemistry chair, the College of Arts and Sciences Curriculum Committee, College of Arts and Sciences dean, the Graduate Council, the Graduate dean, the provost and vice chancellor for Academic Affairs, the Office of Academic Affairs Resource Management, the vice chancellor for Business Affairs, the SACS Accreditation liaison, and the chancellor.
- 2. UNC System Office Review Process and Feedback.** Throughout the review process, the UNCW provided relevant information pertaining to program requirements and resources. The institution submitted appropriate documentation and research to support the statements made.

IV. Recommendation

It is recommended that the Board of Governors approve the University of North Carolina Wilmington's request to establish the Doctor of Philosophy (Ph.D.) in Pharmaceutical Chemistry (CIP 51.2004), effective fall 2022.