NOTRE DAME
OF MARYLAND
UNIVERSITY

February 3, 2020

James D. Fielder, Jr., Ph.D.
Secretary of Higher Education
Maryland Higher Education Commission
6 North Liberty Street
Baltimore, MD 21201

Dear Secretary Fielder:

Enclosed please find our proposal to offer a Master of Science degree in Physician Assistant studies (MSPA). At this time, our health sciences programs are very popular and helping to address the state of Maryland needs. Moreover, NDMU is uniquely positioned to continue to prepare future leaders in the health sciences based upon our record of accomplishment in Nursing and Pharmacy. The proposed MSPA program is a continuation of our long tradition in health science education and a logical extension. The proposed MSPA program signals the ongoing commitment by NDMU to prepare health professionals to have the knowledge, skills and dispositions needed to meet the needs of the state and field of health care.

This degree program addresses the Maryland State Plan for Postsecondary Education, 2017-2021. The MSPA program uses a holistic admissions process to select a talented and diverse student body thereby supporting the State's minority student achievement goals. Accessibility and affordability of education will be maintained, as the University does not charge out of state tuition. The Maryland Higher Education Commission State Plan: *Increasing Student Success with Less Debt 2017-2021* goals and strategies call for Access, Success and Innovation. The proposed program allows students access to an opportunity to enroll in and earn a professional MSPA degree that will support their advancement in the workforce meeting the critical need across Maryland. The proposed program will provide a high quality affordable degree program that fosters innovation and includes support services to ensure student success. The curriculum and support services are designed to facilitate on-time degree completion, include career planning and advising, and provide innovative pedagogies.

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| Institution: | Notre Dame of Maryland University |
| Program: | Physician Assistant |
| Degree: | MS |
| Contact person: | Suzan Harkness. Associate Vice President for Academic Affairs and Assessment<br>410-532-5316, sharkness@ndm.edu |

If you have any questions about this new program, please do not hesitate to call. Thank you in advance for consideration of this proposal. Please find a check in the amount of $850.00 enclosed.

Sincerely,

Sister Sharon Slear

Sr. Sharon Slear, Ph.D.
Provost and Vice President for Academic Affairs

Office Use Only: PP#

MHEC

# Cover Sheet for In-State Institutions
## New Program or Substantial Modification to Existing Program

| Institution Submitting Proposal | Notre Dame of Maryland University |
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*Each action below requires a separate proposal and cover sheet.*

- (●) New Academic Program
- ( ) New Area of Concentration
- ( ) New Degree Level Approval
- ( ) New Stand-Alone Certificate
- ( ) Off Campus Program
- ( ) Substantial Change to a Degree Program
- ( ) Substantial Change to an Area of Concentration
- ( ) Substantial Change to a Certificate Program
- ( ) Cooperative Degree Program
- ( ) Offer Program at Regional Higher Education Center

Payment Submitted: (●) Yes ( ) No

Payment Type: ( ) R*STARS (●) Check

Date Submitted: 2/03/2020

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| Department Proposing Program | Allied and Health Sciences |
| Degree Level and Degree Type | Master / Master of Science Physician Assistant (MSPA) |
| Title of Proposed Program | Physician Assistant |
| Total Number of Credits | 96 |
| Suggested Codes | HEGIS: 1201.00 CIP: 51.0912 |
| Program Modality | ( ) On-campus ( ) Distance Education (*fully online*) (●) Both |
| Program Resources | (●) Using Existing Resources ( ) Requiring New Resources |
| Projected Implementation Date | ( ) Fall ( ) Spring (●) Summer Year: 2022 |
| Provide Link to Most Recent Academic Catalog | URL: http://catalog.ndm.edu/graduate-catalog |
| Preferred Contact for this Proposal | Name: Suzan Harkness, Ph.D.<br>Title: Associate Vice President for Academic Affairs & Assessment<br>Phone: 410-532-5316<br>Email: sharkness@ndm.edu |
| President/Chief Executive | Type Name: Marylou Yam, Ph.D.<br>Signature: [signature] Date: 2/03/2020 |
| | Date of Approval/Endorsement by Governing Board: N/A |

Revised 6/13/18

## Executive Summary

Pursuant to COMAR 13.B.02.03.03D(1) & 13B.02.03.06, Notre Dame Maryland University ("NDMU" or "the University") is pleased to submit a proposal for a new Master of Science in Physician Assistant ("MSPA") program. The demand for PAs is not being met in State of Maryland and nationally, thereby indicating a critical need for an additional PA program in the State. The current terminal academic credential for the PA is the master of science degree. This new 24-month master's program will be slated to begin in summer 2022, following the Accreditation Review Commission on Education for the Physician Assistant ("ARC-PA") provisional accreditation approval.

NDMU's proposal to offer the MSPA program as a high-demand healthcare program is based on a strong market need in the growing health care sector and is complemented by the strength, relevance, and the reputation of NDUM's health-related academic programs. In Maryland and nationally, there is a projected growth rate in job demand for PAs. The MSPA program will also provide a unique opportunity for inter-professional education that is required by accrediting bodies throughout the healthcare education field strengthening this aspect of healthcare programs. Projected enrollment of this program would be up to 30 in the first year and increase to 35 in subsequent years.

NDMU has significant experience with health professions education through its Pharm.D., BSN/MSN, and BA/MA in Art Therapy programs. Establishing a MSPA program further fulfills the University mission, vision, and goals and creates opportunities for nursing, pharmacy, and MSPA students to develop collaborative practice and interprofessional competencies.

The following academic proposal describes the market need, the curriculum design with the student learning outcomes, the evaluation plans to ensure quality, and the resources needed to launch an accredited MSPA program. The program analysis indicates the strong likelihood of success in meeting the students' learning goals and establishing the effectiveness of the program.

### A. Centrality to institutional mission statement and planning priorities

1. ***Provide a description of the program, including each area of concentration and how it relates to the institution's approved mission.***

   In response to a growing state and national physician shortage, particularly in rural and medically underserved areas, NDMU is proposing a new 24-month, 96 credit Physician Assistant program which will award graduates a Master of Science in Physician Assistant. This new master's program will be slated to begin in summer 2022, following the ARC-PA provisional accreditation approval. The MSPA will be primarily housed at NDMU's Baltimore campus and is expected to admit 30-35 students each year in a cohort model.

   Founded and chartered by the State of Maryland in 1895, NDMU was the first Catholic college for women in the U.S. to award the four-year baccalaureate degree. Embracing the vision of its founders, the School Sisters of Notre Dame

("SSND"), the University offers a liberal arts education in the Catholic tradition and has a history characterized by innovation and service. Undergraduate, graduate, and professional degree programs serve a diverse population of women and men through its four Schools: School of Arts, Sciences, and Business, School of Education, School of Nursing, and School of Pharmacy. NDMU is known for being student-centered, for its faculty's commitment to superior teaching and scholarship, and for the importance of service as an integral part of life and of putting one's education to work. Throughout 2020, the University is celebrating its 125th anniversary in higher education.

The mission of NDMU is "to educate leaders to transform the world. Embracing the vision of the founders, the School Sisters of Notre Dame, the University promotes the advancement of women and provides a liberal arts education in the Catholic tradition. Notre Dame challenges women and men to strive for intellectual and professional excellence, to build inclusive communities, to engage in service to others, and to promote social responsibility"

The proposal for a new MSPA program is in direct alignment with the University's mission in terms of providing to its potential graduate students not only access to a profession that promotes intellectual and professional excellence but also through engagement in socially responsible service to the community and society. Service is a key component of community-based healthcare. Additionally, NDMU's proposal is a recognition of the University's societal responsibility to address regional and statewide workforce needs and to prepare leaders in the State of Maryland through its academic programs.

2. ***Explain how the proposed program supports the institution's strategic goals and provide evidence that it affirms it as an institutional body.***

The University's Strategic Plan, *Inspired by Tradition: The Path to Transformation,* calls for the institution to "Advance Transformative Education" and "Expand Community and Global Partnerships." These goals include initiatives to evaluate and respond to market demand by developing innovative programs where the workforce need is great. Notre Dame of Maryland University in its vision sets out "to be recognized as a preeminent Catholic University for integrating innovative programs in the arts and sciences with professional programs, for inspiring students to lead and serve globally, and for promoting the advancement of women" This program will provide students an educational opportunity to meet the institution's strategic goals.

The MSPA program was developed with input from faculty and local community professionals who understand the need for and value of this program to support local and statewide healthcare needs and to provide access to this in-demand career. Maryland's residents will benefit from an expanded

pool of educated and trained PAs. The variety of delivery methods (hybrid and face to face) will increase access for those students who require greater flexibility in degree and course offerings.

The professional MSPA program expresses the mission, vision, and strategic plan of the university through curricula that mix didactic and experiential opportunities while building upon a strong foundation in liberal arts, and the Catholic intellectual traditions and social teaching. The MSPA program, through a final capstone, maximizes professional competence in medical sciences and practice, leadership development in health and healthcare, and an understanding of applied research. The purpose of the capstone is to enhance knowledge and skill acquisition in a focused area of interest that meets a community and social need for service. Special emphasis on women's health and health care for sexual violence will be stressed as important areas of curricular study.

The curriculum of the professional MSPA program will create a societal and health care delivery impact through the:

- Preparation of critical thinkers who are dedicated to communities and populations in the promotion of health and the delivery of medical services because of a strong preparation in the basic and clinical medical sciences, and
- Advancement of practitioners who are adept in incorporating theory, transitional science, and evidence-based practice in the design of clinical practices that lead to effective medical care services delivery and outcomes.

The design of the curriculum and admission processes addresses the Maryland State Plan for Postsecondary Education, 2017-2021. NDMU's MSPA program will use a holistic admissions process to select a talented and diverse student body thereby supporting the State's minority student achievement goals. Accessibility and affordability of this new health sciences program will be maintained and the University does not charge out of state tuition.

3. ***Provide a brief narrative of how the proposed program will be adequately funded for at least the first five years of program implementation.***

Resources for the new program will initially be drawn from reallocated funds through the Office of the Provost and eventually from tuition revenue. A Program Director will be compensated for managing and leading the program, in addition to other faculty and other staff. See Section L, Tables 1 and 2.

4. ***Provide a description of the institution's commitment to a) ongoing administrative, financial, and technical support of the proposed program; and b) continuation of the program for a period of time sufficient to allow enrolled students to complete the program.***

NDMU has committed resources for administrative and financial management for the proposed MSPA program. Program specific administrative and faculty support will be hired to oversee and implement the program. In addition to the University's normal business units (i.e. Human Resources, Registrar, Financial Aid, etc.), NDMU's Office of Information Technology and the Faculty Resource Center will be providing technical guidance and support to faculty and students.

NDMU is committed to offering and providing opportunities for completion of the MSPA program. If the program should be discontinued, NDMU will teach out the program and provide the necessary courses and resources so students will be conferred on a regular schedule.

## B. Critical and Compelling Regional or Statewide Need as Identified in the State Plan:

### *1. Demonstrate demand and need for the program in terms of meeting present and future needs of the region and the State.*

In the modern era of public health, often referred to as Public Health 3.0, the next generation of leaders must be mult-skilled practioners prepared to address problems locally, regionally, nationally, and around the world. The Association of American Medical Colleges estimates the country will need between 46,900 and 121,900 physicians by 2032 as the demand for physicians continues to grow faster than supply.[1] Shortages are expected to be more serious in areas where there are higher numbers of rural or underserved populations.

The Health Resources and Services Administration (HRSA) completed a study in November 2016 related to pending physician shortages and indicated that the answer to the growing physician shortage may be an increase in Physician Assistants and Nurse Practioners to fill the gap. The projected shortage of primary care physicians across the nation calls for new delivery system changes and full utilization of physician assistants to meet urgent healthcare needs.[2] According to the Maryland Department of Health's 2016 Primary Care Needs Assessment, the State of Maryland had 32 primary care Health Professional Shortage Areas (HPSA) designations. Baltimore City had 11 of the state's 32 primary care designations, encompassing 42.3 percent of the city's population.[3] NDMU's MSPA program is a pipeline to help address the gap in the State of Maryland and regionally, particularly in the service of underserved populations.

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1 Association of American Medical Colleges, 2019 Update: The Complexities of Physician Supply and Demand: Projections from 2017 to 2032. April 2019.

2 U.S. Department of Health and Human Services, Health Resources and Services Administration, National Center for Health Workforce Analysis. 2016. National and Regional Projections of Supply and Demand for Primary Care Practitioners: 2013-2025. Rockville, Maryland.

3 Maryland Department of Health and Mental Hygiene, 2016 Primary Care Needs Assessment. March 31, 2016.

NDMU's review of the literature, data, and community outreach indicate the need for a PA program that attracts students who want to live and work in underserved areas, and NDMU's program would be well supported by the medical community through clinical site placement, teaching and advisement.

2. ***Evidence that the perceived need is consistent with the Maryland State Plan for Postsecondary Education.***

The goals and strategies of the Maryland State Plan for Postsecondary Education: *Increasing Student Success with Less Debt 2017-2021* call for Access, Success and Innovation. Particularly, the State Plan calls for institutions to "Promote and implement practices and policies that will ensure student success" and "Foster innovation in all aspects of Maryland higher education to improve access and student success." NDMU's proposed MSPA addresses the following strategies:

- Strategy 7: Enhance career advising and planning services and integrate them explicitly into academic advising and planning.
- Strategy 8: Foster innovation in all aspects of Maryland higher education to improve access and student success.
- Strategy 11: Encourage a culture of risk-taking and experimentation.

The development of NDMU's proposed MSPA program is grounded in calls from the healthcare community for additional practioners. The proposed MSPA program provides students access to an innovative opportunity to enroll in and earn a professional degree in the healthcare profession that will support their advancement in the health workforce and meet a critical need across Maryland and the nation. The program will provide a high quality affordable professional degree program that fosters innovation and includes support services to ensure student success. The curriculum and support services are designed to facilitate on-time degree completion, include career planning and advising, and provide innovative pedagogical options that serve the needs of students and provide professional clinical experience. NDMU has a long history in professional health education and has extensive relationships and experience in seeking, arranging, and placing its students into a variety of field work sites. For example, NDMU's School of Pharmacy has partnerships with 46 hospitals and 3 long-term care facilities in the region. Similarly, the School of Nursing (which recently celebrated its 40th anniversary) has partnerships with 22 hospitals. NDMU will utilize these existing relationships and will expand and develop new partnerships to support this new professional degree program.

**C. Quantifiable and reliable evidence and documentation of market supply and demand in the region and state.**

Economists have found that despite the increasing cost of attending college, the financial benefits of higher education still outweigh the expenses.[4] In fact, although students have been paying more to attend college—trends that have led many observers to question whether a college education remains a good investment, an analysis of earnings since the 1970's demonstrates that a college degree leads to higher lifetime earnings. Researchers conclude that college remains a good investment because the wages of those Americans without a degree have been falling or flat, keeping the college wage premium near an all-time high. To illustrate, the U.S. Bureau of Labor Statistics (BLS) reported in 2018 the median wages for an individual possessing a high school diploma to be $37,960 ($730/week x 52 weeks) with an unemployment rate of 4.1% and a Bachelor's degree to be $62,296 ($1,198/week x 52 weeks) with an unemployment rate of 2.1%. In comparison the median income of an individual possessing a Master's degree is $74,568 ($1,434/week x 52 weeks) with an unemployment rate of 2.1% (BLS, 2019).[5] Additional education and professional training via a graduate-level program provides increased marketability and earning potential for graduates.

Physician assistant (PA) graduates are academically and clinically prepared to practice medicine with the direction and responsible supervision of a doctor of medicine or osteopathy. The physician-PA team relationship is fundamental to the PA profession and enhances the delivery of high-quality health care. Graduates of PA programs work with physicians to improve the delivery of health care services to residents of Maryland and to improve the overall delivery of health care through increased efficiencies and effectiveness.

The Bureau of Labor Statistics (BLS) under the U.S. Department of Labor (DOL), projects an increase of PA jobs from 118,500 in 2018 to 155,700 in 2028, an increase of 36,900 jobs (31%) nationally. Combined with 115,000 estimated occupational separations over ten years (11,500 annually), BLS projects 151,900 openings over ten years, or 15,190 annual openings. BLS has ranked Physician Assistant as #7 in its list of *Fastest Growing Occupations.* [6]

The Physician Assistant Education Association (PAEA) reported in its latest "Annual Report", published in October 2019, that 9,202 students graduated from PA programs across the country. Comparing this information to BLS data indicates a 5,988 national annual average graduate shortfall.[7]

PAEA data also indicates that there are high numbers of applicants and an insufficient number of available slots in educational programs. Most existing PA educational programs receive a large number of applications annually but the

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4 https://www.bls.gov/opub/mlr/2014/beyond-bls/is- a-colleg-degree-still-worth-it.htm
5 https://www.bls.gov/emp/chart-unemployment-earnings-education.htm
6 https://www.bls.gov/emp/images/growing_occupations.png
7 https://paeaonline.org/wp-content/uploads/2019/10/program-report-34-20191002.pdf

qualified applicant to enrolled seat ratio is only 33% across the country.[8] From 2013 to 2017, applications have increased 26% from 21,730 to 27,370.[9]

In Maryland, the Maryland Department of Labor (MDOL) projects an increase in PA jobs from 2,820 in 2016 to 3,446 in 2026, an increase of 626 jobs (22%). Combined with 1,653 estimated occupational separations over ten years (165 annually), MDOL projects 2,279 openings over ten years, or 228 annual openings. MDOL estimates that in 2018 there were 3,040 PAs employed in the state and reported an average salary of approximately $108,000.[10] MDOL has labeled PAs as one of its "hot jobs".[11]

According to the Maryland Higher Education Commission's (MHEC) Academic Program Inventory and Trends in Degrees by Program Report 2018, Maryland currently has four colleges or universities approved to offer PA programs. In 2018, degree production is at 90 degrees annually (3-YR rolling average of graduates). Compared to MDOL data, this leads to the conclusion of an average annual shortfall of 138 graduates.

It must be noted that the immediately preceding analysis may/will be subject to change in future years based on two factors: 1) In 2015, UMES lost its accreditation but has reapplied for Provisional accreditation; and 2) In 2019, Frostburg State University enrolled its first class of PA students and will produce graduates in the future. Additionally, ARC-PA Standard E1.09 also caps maximum entering class sizes.[12] Considering these factors and assuming increased capacity and full enrollment/graduation in future years, the analysis still estimates an annual shortfall of 88 graduates.

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| Total 10 Year Openings: | 2,279 | |
| Average Annual Openings: | 228 | PROJ |
| Current State Degree Production (3-Yr Avg): | 90 | 140 |
| Towson/CCBC | 36 | 40 |
| UMB/AACC+ | 42 | 40 |
| UMES* | 12.33333 | 30 |
| Frostburg** | 0 | 30 |
| Annual Shortfall: | 138 | 88 |

The Federal government via the HRSA and the State of Maryland have recognized the shortage of PAs and as a result have established the State Loan Repayment Program and the Maryland Loan Repayment Program for Physicians, respectively. The program requires PAs to serve a two-year obligation in a HPSA or medically underserved area. To reiterate, much of

8 https://paeaonline.org/wp-content/uploads/2017/12/Applicant-and-Matriculant-Data-from-CASPA.pdf
9 End of Cycle CASPA Reports. https://paeaonline.org/caspa/program-resources/
10 http://www.dllr.state.md.us/lmi/wages/2401000024/29-1071.htm
11 https://mwejobs.maryland.gov/admin/gsipub/htmlarea/uploads/HotJobsBrochure.pdf
12 http://www.arc-pa.org/wp-content/uploads/2020/01/AccredManual-5th-edition-11.19.pdf

Baltimore City, to which NDMU is an "anchor institution," is designated as a HPSA.

Physician Assistant is listed as #19 on Glassdoor's list of *Bright Futures Ahead: These are the Jobs with the Best Career Opportunities in the U.S.*[13] Monster.com advertised 163 jobs for PAs on December 9, 2019 for the state of Maryland, while Glassdoor.com had posted 44,267 PA positions nationwide and 1275 in Maryland.[14]

The projected growth does not take into consideration health care reform and the ongoing efforts by state health care leaders and health professions educators to gain a fuller recognition of the physician assistant profession within the medical community. The projected increase in employment demand is much higher than the average for all occupations. For example, the National Association of Community Health Centers recently released their primary care workforce needs and reported a two-year need of 11,273 midlevel providers.

Documentation that the physician assistant career is a high demand field can be found in other occupational forecast resources, all showing the physician assistant career to be one of the fastest growing career options in the nation. The Health Care Career Map indicates that between 2002 -2012 the Physician Assistant profession was the second fastest growing health care practitioner career.[15] Additionally, the website of the Physician Assistant Education Association (PAEA) cites www.CNNMoney.com which ranked the Physician Assistant profession as the second best job in America in 2018.[16] U.S. News and World Report ranked PA as #3 in its Rankings of the 100 Best Jobs for 2019.[17]

Experts on the hiring of PAs in hospital systems note that with an aging population, an ongoing physician shortage, and with more than 10,000 current PA job openings, it is a "buyer's market" for PAs. Since so many jobs are available, it can be difficult, as an organization, to fill them – so employers need to be more innovative to not only recruit, but to retain staff once hired. "Providers may come for the initial salary jolt, but keeping them is more about culture, support, and growth,"[18]

Projected enrollment in the MSPA program is included in Section L.

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13 https://www.glassdoor.com/research/best-career-opportunities/

14 https://www.glassdoor.com/Job/jobs.htm?suggestCount=0&suggestChosen=false&clickSource=searchBtn&typedKeyword=physician+assistant&sc.keyword=physician+assistant&locT=S&locId=3201&jobType=

15 http://healthcarecareermap.org/LaborMarket-Growth-Update.asp?UniqueId=37

16 http://www.paeaonline.org/index.php?ht=a/GetDocumentAction/i/105985

17 https://money.usnews.com/careers/best-jobs/rankings

18 https://www.aapa.org/news-central/2019/12/experts-discuss-impacts-of-pa-np-onboarding-on-organizational-finances/

**D. Reasonableness of Program Duplication, if any.**

A review of the MHEC Academic Program Inventory indicates that there are currently four other Maryland colleges and universities approved to offer a MSPA related program but only three currently operating. The University of Maryland Eastern Shore lost its PA program accreditation in 2015. Due to accreditation and licensure requirements, NDMU proposed MSPA and existing programs are bound to contain substantial similarities, including degree level, program objectives, curriculum, etc.. Comparable professional preparation programs in the health sciences, including nursing, occupational therapy, and physical therapy are explicitly similar across different institutions given the educational outcomes required for licensure.

Despite the fact that there are three currently operating educational programs for PAs in the State (Frostburg State University, Towson University/Community College of Baltimore County (TSU), and the University Maryland Baltimore/Anne Arundel Community College (UMB)), NDMU contends that our proposed MSPA program would not constitute "unreasonable program duplication which would cause demonstrable harm to another institution" (pursuant to §11-206 of the Education Article of the Annotated Code of Maryland). Due to the significant state and national workforce demand and shortage of supply of graduates, NDMU's MSPA is a timely example of reasonable program duplication to meet a compelling state workforce need. See Section C for additional information on workforce demand/supply.

While NDMU is in close proximity to UMB and TSU the clear and compelling workforce demand for PAs makes it implausible that NDMU would cause demonstrable harm to either institution. NDMU's MSPA program can serve as an additional needed pipeline to help address HPSA and other service gaps in the State of Maryland and regionally, particularly in the service of underserved populations. Additionally, ARC-PA (Standard E1.09) also caps maximum entering class sizes, limiting other institution's ability to scale up on demand/quickly to meet emerging workforce needs.

While not a criterian for the evaluation of program duplication under COMAR 13B.02.03.09, the availability of clinical sites is an often cited concern for new health profession programs. NDMU is confident in its ability to secure adequate site placements for its students. As previously referenced, NDMU's School of Pharmacy has partnerships with 46 hospitals and 3 long-term care facilities in the region. Similarly, the School of Nursing (which recently celebrated its 40th anniversary) has partnerships with 22 hospitals. NDMU will utilize these existing relationships and will expand and develop new partnerships to support this new professional degree program.

Moreover, NDMU, with a traditional women's college and a 52%

University-wide minority student population, will provide a pathway for women and minority students both traditional and nontraditional to enter the professional MSPA program and prepare for a fulfilling and critical demand occupation.

**E. Relevance to the implementation or maintenance of high-demand programs at HBIs.**

Currently, none of the four Historically Black Colleges and Universities (HBCU) in the State of Maryland offers an accredited degree program in PA studies. However, in the event UMES does become reaccredited, NDMU does not believe our proposed MSPA program will compete with UMES' program. NDMU and UMES operate in geographically different markets. Additionally, NDMU projects that even if NDMU is approved to offer the MSPA, a significant shortage will still remain in the number of annual graduates to meet demand. Projections indicate that NDMU would be able to operate alongside any HBCU without impact.

Geographically, NDMU is located at a minimum over an hour car-ride away from any of UMES' current locations. It is approximately 138 miles (over 2 hours) from UMES' main campus in Princess Anne, 48 miles from the Universities of Shady Grove, and 74 miles from the University System of Maryland Hagerstown.

**F. Relevance to the support of the uniqueness and institutional identities and missions of HBIs.**

An appropriate student for the MSPA program would apply after completing a baccalaureate degree at any undergraduate institution, including at any of the State's HBCU. The proposed program would not directly affect the implementation, maintenance, uniqueness, identity, or mission of these institutions.

**G. Adequacy of curriculum design program modality, and delivery to related learning outcomes consistent with Regulation 3.10 of COMAR.**

***Provide list of courses, educational objectives, intended student learning outcomes, general education requirements, specialized accreditation, and contracts with other institutions.***

Required pre-requisites for admission into a professional program are available from NDMU: B or better in pre-requisite courses is required and all courses must have been completed in the past 10 years

- Human Anatomy & Physiology I (4 credit hours)
- Human Anatomy & Physiology II (4 credit hours)
- Basic Statistics (3 credit hours)

- Biochemistry (3 credit hours)
- Microbiology (3 credit hours)

**Admission Criteria for the Master of Science Physician Assistant Program**

Admission to the NDMU MSPA Program uses the national admission CASPA system and begins once the ARC-PA assigns an initial site visit date and subsequently approves the application for provisional accreditation. Evaluation of completed applications will begin and continue until all seats in the class are potentially filled for regular admission. Applicants cannot be notified of acceptance until provisional accreditation has been approved.

This initial evaluation of the application will determine which applicants are eligible for an on- campus interview. That assessment is based on successful completion of a bachelor's degree, a minimum GPA of 3.0, three letters of reference, a personal statement, and evidence that five (5) pre- requisites courses can be completed no later than the end of the spring term prior to summer admission. The on-campus interview assesses professional preparedness and motivation, personal qualities, communication skills, ability to be a team player, and decision-making. The final decision uses a holistic review to assess an applicant's unique experiences alongside the GPA, work experiences, extracurricular activities/community engagement, volunteer work, and potential to be successful in the demanding curriculum.

**Proposed Master of Science Physician Assistant Program Course Sequence**

The NDMU MSPA Program is a professional clinical master's degree program where persons with baccalaureate degrees in a variety of fields/disciplines are admitted and complete a medical curriculum over two calendar years. This program will be offered on ground and online. The curriculum is designed for full-time students admitted in a cohort to be prepared as generalists with an opportunity to focus an in-depth experience through the capstone course. As a generalist, the student is expected to learn several possible roles involving that of a direct care provider, consultant, educator, manager and leader, researcher, and advocate for the field (ARC-PA) Accreditation Standards, 5th Edition). It is expected that newly introduced ARC-PA standards will be effective 9/2020. The initial admission for the first year includes a cohort of up to 30 students. The following student learning outcomes and program goals guide the selection of courses:

**Program Goal 1:** The graduates of the MSPA program will demonstrate the knowledge, skills, and attitudes of a PA medical provider of individuals, populations, and communities through a holistic and personalized understanding of occupational performance in varied, complex, or everyday contexts.

**Student Learning Outcomes:**

- The graduate will apply clinical medical science theory and evidence to selection and skillful implementation of evaluation approaches and interventions to achieve expected outcomes related to the medical care of individuals, populations, and communities.
- The graduate will apply therapeutic use of basic medical science to facilitate the role performance in the home, school, workplace, community, and other settings in which individuals and populations participate.
- The graduate will affect the health, well-being, and quality of life of individuals, populations, and communities through engagement in occupations and activities that address physical, cognitive, psychosocial, sensory, and spiritual aspects of performance embedded in context.

**Program Goal 2:** The graduates of the MSPA program will be scholars and educators in the science of PA practice, evidence, quality improvement, and implementation science to promote health care and human services that are client and family-centered and lead to valued outcomes for excellent service delivery.

**Student Learning Outcomes:**

- The graduate will engage in life-long learning and professional development to remain current with the evidence in the profession, healthcare, and human services.
- The graduate will demonstrate knowledge of the research, theory development, evidence-based practice, and education processes appropriate to continuous improvement of practice.
- The graduate will synthesize and disseminate advanced knowledge through the capstone process and experience.

**Program Goal 3:** The graduates of the MSPA program will be innovators, leaders, and advocates of socially and culturally responsible and inclusive healthcare and human services on behalf of the public; local, national and global communities; and the profession of occupational therapy.

**Student Learning Outcomes:**

- The graduate will uphold the ethical standards, values, and attitudes of the physician assistant profession in leading and managing PA services.
- The graduate will effectively collaborate to affect patient-centered care through engagement with interprofessional teams and through the supervision according to standards and licensure requirements of physician assistants.
- The graduate will demonstrate leadership through knowledge of systems and

public policy and of the change and innovation process in advocacy

**Notre Dame Maryland University Master of Science Physician Assistant Studies**

**CURRICULUM**

The proposed 24-month master's degree MSPA curriculum requires intensive study in science, general education, and appropriate clinical experience. The first year of study is didactic in nature. Students attend classes for 35 to 40 hours per week. In the second year, students complete clinical rotations in medicine, family practice, pediatrics, women's health, emergency medicine, community medicine and surgery. Students return to the NDMU campus between rotations for seminars during their clinical year.

**Year 1: Didactic**
**Entering Summer Semester**

| | |
|---|---|
| Introduction to PA Profession<br>2 credits | PAS 500 |
| Anatomy<br>3 credits | PAS 501 |
| Physical Diagnosis I<br>3 credits | PAS 502 |
| Public Heath Issues<br>1 credits | PAS 503 |
| Physiology/Pathophysiology I<br>3 credits | PAS 504 |
| **Total**<br>**12 credits** | |

**Fall Semester**

| | |
|---|---|
| Physiology/Pathophysiology II<br>5 credits | PAS 505 |
| Clinical Medicine I (neurology, musculoskeletal, hematological and pulmonary)<br>5 credits | PAS 506 |
| Physical Diagnosis II<br>3 credits | PAS 507 |
| Pharmacology I<br>3 credits | PAS 509 |
| **Total**<br>**16 credits** | |

**Winterim**

| | |
|---|---|
| Medical Law, Ethics, and the Health Delivery System<br>1 credit | PAS 508 |
| Clinical Laboratory Medicine and Genetics<br>2 credits | PAS 510 |

**Total**
**3 credits**

**Spring Semester**

| | |
|---|---|
| Pharmacology II<br>2 credits | PAS 511 |
| Clinical Medicine II (Orthopedics, Dermatology, Nephrology, Endocrinology, Obstetrics/Gynecology)<br>7 credits | PAS 512 |
| Clinical Skills<br>3 credits | PAS513 |
| Research Methods<br>2 credits | PAS 515 |
| Behavioral Medicine<br>2 credits | PAS 514 |

**Total**
**16 credits**

**YEAR II**
**Summer Semester**

| | |
|---|---|
| Clinical Medicine III (eyes, ears, nose, and throat (EENT)<br>5 credits | PAS 516 |
| Surgery and Emergency Medicine<br>2 credits | PAS 517 |
| Pharmacy III<br>2 credits | PAS 518 |
| Women's Health Clinical (4 weeks)<br>4 credits | PAS 523 |

**Total**
**13 credits**

**Clinical Rotations**
**Fall Semester**

| | |
|---|---|
| Family Medicine (6 weeks)<br>6 credits | PAS 522 |
| Internal Medicine 6 weeks)<br>6 credits | PAS 520 |
| General Surgery (6 weeks)<br>6 weeks | PAS 521 |

**Total**
**18 credits**

**Winterim**

| | |
|---|---|
| Pediatrics (4 weeks)<br>4 credits | PAS 526 |

**Total**

**4 credits**

**Spring Semester**

| | |
|---|---|
| Emergency Medicine (6 weeks)<br>6 credits | PAS 522 |
| Behavioral Health (4 weeks)<br>4 credits | PAS 525 |
| Capstone<br>4 credits | PAS 526 |
| **Total**<br>**14 credits** | |

**Total Credit Hours for Year 1: 47 credits**
**Total Credits Hours for Year 2: 49 credits**
**Total Hours for entire curriculum: 96 credits**

## Course Descriptions

**PAS 500 Intro to PA Profession** **2 credits**

This course presents an introduction to the PA profession: its history, organizations, current trends in the profession, the physician/PA team, professionalism, patient consent, HIPAA, credentialing, and licensure. Students explore cultural issues, patient care, quality assurance, and risk management. The students will be introduced to manual medicine and have the opportunity to learn selected techniques associated with manual medicine.

**PAS 501 Anatomy** **3 credits**

The Gross Anatomy course focuses on the body's structure. The course is organized according to all major body regions: upper limb; lower limb and back; thorax; abdomen; pelvis; and head and neck. Lectures, tutorials, and computer-aided instruction will be given throughout the course. Students will work with prosections in the anatomy laboratory. Each student is expected to learn anatomical terminology as well as three-dimensional and radiological anatomy. Throughout the course, students will be challenged to relate the anatomy to the solution of clinical problems. The latter is an integral part of the anatomy curriculum.

**PAS 502 Physical Diagnosis I** **3 credits**

This course introduces the student to patient history taking and communication skills. Students will use medical diagnostic equipment as they develop the skills needed to perform complete and focused physical examinations. Pediatric, adult, and geriatric physical examinations will be emphasized.

**PAS 503 Public Health Issues** **1 credit**

The course addresses public health issues, introduces the student to promotion of health and lifestyle changes as well as prevention of disease. Identification of community resources and health services will be researched.

**PAS 504 Physiology/Pathophysiology I 4 credits**
This course presents core concepts in cellular physiology, immunology, infectious disease processes, endocrinology, and an introduction to functional neuroanatomy.

**PAS 505 Physiology/Pathophysiology II 5 credits**
This is a systems-based course that provides the foundation for clinical medicine. Involves the study of regulatory mechanisms responsible for maintaining homeostasis and the malfunctions that can occur at the molecular, cellular, tissue, organ, and system levels that can lead to disease. Normal physiology followed by the pathophysiology for selected diseases in each system is presented. Genetics and molecular mechanisms will be discussed as applicable.

**PAS 506 Clinical Medicine I 5 credits**
This course is designed to study the etiology, presentation, evaluation and management of various diseases and disorders. Students will learn how to order and interpret diagnostic tests and formulate differential diagnoses for common diseases found in the primary care setting. Emphasis in this course will be on the neurology, musculoskeletal, cardiovascular, hematological and pulmonary systems.

**PAS 507 Physical Diagnosis II 3 credits**
This course is a continuation of PAS 502 Physical Diagnosis I. Students will learn the components of the physical examination, recognize abnormal and normal findings, and communicate the information in oral and written formats. Pediatric, adult, and geriatric physical examinations will be emphasized. Simulated patients will be used to enhance history taking and physical examination skills.

**PAS 508 Medical Law, Ethics and the Healthcare Delivery System 1 credit**
This course provides the structure and function of the healthcare delivery system, medical law, and ethical theories and issues as they apply to the PA and PA/physician team. Issues discussed will include reimbursement, inequality to accessing health care issues, health care policies, quality assurance, and the roles of the different members of the health care professional team.

**PAS 509 Pharmacology I 3 credits**
This is the first of three courses in Pharmacology. Students will be introduced to the general principles of pharmacology, pharmacokinetics, pharmacotherapeutics, and pharmacodynamics. The course runs parallel to Clinical Medicine and is designed to provide the background for appropriate use of pharmaceuticals in the treatment of disease. Focus is on identifying drug classes, side effects, recognizing adverse drug reactions, drug-drug interactions, mechanisms or action, importance of patient education to assist in the compliance of medications and avoiding problems. When indicated, information will be provided on over the counter and alternative medicines.

**PAS 510 Clinical Laboratory Medicine and Genetics 2 credits**

This course identifies and describes common laboratory tests, demonstrates what types of laboratory tests to order for specific diseases and disorders, and reviews basic interpretation of laboratory test results. Ordering and interpreting genetic testing and application of genetic information and results in the primary care setting will be discussed.

**PAS 511 Pharmacology II** **2 credits**

This is the second of three courses in Pharmacology. Students will continue to learn the the general principles of pharmacotherapeutics. The course runs parallel to the Clinical Medicine and is designed to provide the background for appropriate use of pharmaceuticals in the treatment of disease. Focus is on identifying specific drug classes, mechanisms or action, importance of patient education to assist in the compliance of medications and avoiding problems. Information will be provided on over the counter and alternative medicines.

**PAS 512 Clinical Medicine II** **7 credits**

Continuation of PAS 506 studying the etiology, presentation, evaluation and management of various diseases and disorders. Students order and interpret diagnostic tests and formulate differential diagnoses for common diseases found in the primary care setting. Emphasis in this course will be on the Renal, GI, Endocrinology, and Reproductive Infectious diseases.

**PAS 513 Clinical Skills** **3 credits**

This is a course in clinical skills and procedures needed for clinical practice. Students will be instructed in skills such as manual medicine, IV placement, injections, arterial blood gases, nasogastric tube placement, urinary bladder catheterization, ACLS, and indications and interpretation of radiographs. Students will have the opportunity to enhance their skills by completing simulations. Prerequisites: Successful completion of the first summer and fall term in the professional phase of the program.

**PAS 514 Behavioral Medicine** **2 credits**

This course is designed to provide the student with tools to evaluate, diagnose, and manage psychiatric conditions. Students will gain an appreciation for the Diagnostic and Statistical Manual (DSM) classifications of mental illness as well as the importance of timely referrals to other healthcare professionals. Information will be provided on behavioral issues that impact health, the genetic and environmental aspects of behavioral disorders, etiology and treatment of substance abuse, responses and coping mechanisms for stress, growth and development, life cycle development, personality development, human sexuality, death and dying and bereavement.

**PAS 515 Research Methods** **2 credits**

This course is designed, with emphasis on the incorporation of evidence-based medicine, to acquaint the student with common research methodology. Students will learn how to construct a research proposal that would be acceptable to peers and external reviewers. Students will produce a proposal, including the topic, research question(s), review of the literature with an emphasis upon evidence-based studies, proposed methodology and

design, and bibliography. The student will learn how to perform medical literature searching strategies that yield optimal results. Methods for critically appraising the medical literature are emphasized throughout the course along with strategies for keeping up with new medical findings.

**PAS 516 Clinical Medicine III** **5 credits**

Continuation of PAS 506 and PAS 512 studying the etiology, presentation, evaluation and management of various diseases and disorders. Students will learn how to order appropriate and interpret diagnostic tests and formulate differential diagnosis for common diseases found in the primary care setting. Emphasis in this course will be on the eyes, ears, nose and throat (EENT), pediatrics, and dermatology. Geriatric topics not previously covered throughout the clinical medicine systems will be discussed.

**PAS 517 Surgery and Emergency Medicine** **2 credits**

This course is designed to present the etiology, pathophysiology, clinical manifestations, and the appropriate management of medical emergencies. Emphasis is also placed on acute care and management of surgical conditions.

**PAS 518 Pharmacology III** **2 credits**

This is the last of three courses in Pharmacology. Presents principles of applied pharmacology and pharmacodynamics. The course runs parallel to the Clinical Medicine course and is intended to provide students with a complete review of the appropriate indications, side effects, recognition of adverse drug reactions, drug-drug interactions of commonly used pharmaceuticals in the treatment of disease. Focus is on identifying drug classes, side effects, recognizing adverse drug reactions, importance of patient education and compliance in medication use. This is the last of three courses in Pharmacology.

**PAS 519 Family Medicine** **6 credits**

This is a required 6-week rotation in family practice under the supervision of a clinical site preceptor. The student will gain experience and be able to integrate the knowledge and skills learned during the didactic phase to interact with patients and their families, order and interpret lab and diagnostic tests, evaluate, and manage patients effectively. Students will have the opportunity to manage acute and chronic care in addition to patient education and increase their knowledge in the use of psychoactive pharmaceuticals and perform a thorough psychiatric interview. (Minimum of 40 hours a week)

**PAS 520 Internal Medicine** **6 credits**

This is a required 6-week rotation in internal medicine under the supervision of a clinical site preceptor. The student will gain experience and be able to integrate the knowledge and skills learned during the didactic phase to interact with patients and their families, order and interpret lab and diagnostic tests, evaluate, educate patients about health maintenance, review patient records and evaluate established patients for their continual medical care. Students will have the opportunity to manage acute and chronic care in addition to patient education. With experience in both inpatient and outpatient settings, the student will be able to recognize emergent, acute, and chronic diagnoses and participate in the necessary continuity of care for each. (Minimum of 40 hours a

week)

**PAS 521 General Surgery** **6 credits**

This is a required 6-week rotation in surgery under the supervision of a clinical site preceptor. The student will participate in pre, peri, and postoperative care. Students will gain experience in the evaluation of acutely ill surgical patients, assist in surgery, and identify indications, contraindications, and potential complications. (Minimum of 40 hours a week)

**PAS 522 Emergency Medicine** **6 credits**

A 6-week required clinical experience under the supervision of the site preceptor in which the student will have the opportunity to evaluate and treat a wide variety of urgent, emergent and life-threatening conditions. The student will learn to triage patients, interact with patients' families, and become more proficient at taking rapid accurate histories, performing physical examinations, ordering appropriate diagnostic tests, and formulating a treatment plan. The student will have the opportunity to make oral presentations to preceptors. Clinical procedures performed during this rotation may include suturing, endotracheal intubation, and ACLS. (Minimum of 40 hours a week)

**PAS 523 Women's Health** **4 credits**

This is a required 4-week rotation under the supervision of the site preceptor in which students will have the opportunity to see a wide variety of concerns related to female reproductive system. Students will further develop their knowledge of assessment and treatment, preventive care, and screening recommendations of women's health issues. The rotation will also provide the opportunity for the student to become more familiar with women's health exams, pregnancy, menopause, and infertility. The student will have opportunities to participate in pre- and post-natal care. (Minimum of 40 hours a week)

**PAS 524 Pediatrics** **4 credits**

This is a required 4-week rotation in pediatrics under the supervision of a clinical site preceptor. The student will refine their history taking and physical examination skills in the pediatric population, perform well child checks, evaluate children for developmental milestones, and diagnose and treat acute and chronic illnesses in children and adolescents. The student will have the opportunity to educate and counsel the patient and their parent or guardian. (Minimum of 40 hours a week)

**PAS 525 Behavioral Health** **4 credits**

This is a required 4-week rotation in mental health/psychiatry clinical site preceptor. This experience gives the student the opportunity to enhance their knowledge and skills in the diagnosis and management of individuals with specific mental health disorders. Students will further develop their knowledge of assessment and treatment, preventive care, and screening recommendations of mental health issues. The rotation will also provide the opportunity for the student to become more familiar with the psychiatric examination,

mental health assessment, and the use of psychiatric medications. (Minimum of 40 hours a week)

**PAS 526 Capstone** **4 credits**

This course is designed to enable PA students to research and prepare a scholarly paper on an approved topic in clinical medicine. The student will be required to present the paper to peers, PA program and College faculty prior to graduation. Prerequisites: Successful completion of the didactic phase of the program.

## H. Adequacy of Articulation.

Not Applicable, although there exists potential for future articulations to enhance educational opportunities.

## I. Adequacy of Faculty Resources

Hiring Plan for the Master of Science Physician Assistant Program

1. Hire Program Director on a 12-month faculty contract at a minimum of 15 months ahead of initial accreditation site visit from ARC-PA.
2. Hire a part-time (.20 FTE) Medical Director to assist in securing clinical rotation sites and validate the proposed curricula at a minimum of 9 months ahead of initial accreditation site visit from ARC-PA.
3. Hire the Clinical Coordinator (PA-C) on a 12-month faculty contract to begin securing fieldwork contracts at a minimum of 9 months ahead of initial accreditation site visit from ARC-PA.
4. Hire the Academic Coordinator (PA-C) on a 12-month faculty contract to continued academic curriculum development at a minimum of 9 months ahead of initial accreditation site visit from ARC-PA.
5. Near the end of the planning year for the PA Program, hire the third PA-C or PhD faculty on a 12-month contract. The areas that this person would cover would be behavioral sciences, research courses, evidence-based medicine, and the capstone research project. Also select the adjunct faculty to assist with gaps in teaching during the curriculum.

This hiring plan assumes the Program Director and PA-C faculty all have .5 release time and are on 12-month faculty contracts. The plan also assumes a teaching load of three or four 3-credit courses per semester.

All core teaching faculty (both MD/DO and PA-C) must be a licensed PA in Maryland, possess at least a master's degree (preferably a doctoral degree) with their PA preparation. The faculty who teach the research courses and advise research application will preferably possess either a

doctoral degree with their PA credential or meet other scholarship requirements such as a PhD, Dr.PH, or DSc whose backgrounds includes grants and/or first authorship in peer-reviewed journals. Faculty members must demonstrate expertise in the courses they are teaching as well as in the content delivery methods. Evidence of expertise is provided through documentation of continuing professional development, relevant experience, and a faculty development plan for acquiring new content and incorporation of feedback from course evaluations.

Full-time faculty will constitute 60% of the instructional staff and adjunct faculty will constitute 40% of the instructional staff. As such, 60% of the courses will be taught by full-time faculty and up to 40% of the courses could be taught by part-time faculty

**J. Adequacy of Library Resources**

Since its opening in 1973, the Loyola/Notre Dame Library has served as a critical resource for outstanding teaching and scholarship. Notre Dame and Loyola have recently completed a joint renovation and expansion project. The results of this project are expanded use of technology for teaching and learning; accommodation of greater numbers of students, faculty and community patrons; and vibrant, vital center for scholarly exploration and achievement.

The Loyola/Notre Dame Library is open 7 days a week during the fall, spring, and summer semesters. The Loyola Notre Dame Library provides information services and resources to support the academic programs and educational concerns of Notre Dame of Maryland University and Loyola University Maryland. Through the Library's website, faculty, students and staff may access an extensive array of books, journals, databases, and streaming video to support research, teaching, and learning.

The library's collection consists of 455,000 volumes, 1,421 print and 22,126 electronic periodical subscriptions, and 39,000 media items. The library's web site is the gateway to a wealth of information, including over 120 online databases, which provide access to over 300,000 journals, magazines, and newspapers in print and electronic formats. The Loyola Notre Library's Online Journal holdings are substantial, including 143 peer reviewed Journal titles.

Additionally, the Library provides access to collections at other partner libraries:

- The University System of Maryland and Affiliated Institutions consortium provides access to over 9 million items at 17 member libraries.

- The Eastern Academic Libraries Trust (EAST), a print archive that guarantees access to 6 million volumes via Interlibrary Loan.

Assistance Provided

- Students, faculty and staff may request help in-person, via email, instant messaging, and telephone.
- Online chat reference is available 24 hours a day, seven days a week.
- Information about copyright is available through a resource guide, workshops and individual consultations provided by a librarian in the Copyright Information Center.

Other Library Resources

- 693 individual seats are available for studying in addition to the learning spaces below:
  - a 100 seat auditorium
  - Two computer instructional labs: Lab A has 20 seats; Lab B has 30 seats
  - The *Collaboratory at the Library*, an active learning space that accommodates up to 22 students in a flexible environment
  - a 24 seat screening room cyber café and a multi-functional gallery used for events and flexible study space group study areas
  - seminar rooms
  - 91 computers with Microsoft Office and access to the Internet
  - Adaptive technology mainstreamed throughout the Library to provide access for disabled users
  - Makerspace, a technology-rich environment that fosters creation, innovation, and collaborative learning.

Databases needed in a PA program that the library currently provides:

- Academic Search Complete
- Buros Mental Measurement
- CareNotes
- CINAHL
- Cochrane Database of Systematic Reviews
- DSM-5
- DynaMed Plus
- ERIC
- Health and Psychosocial Instruments
- Health Source: Nursing/Academic Edition
- JSTOR
- MEDLINE
- Nursing & Allied Health Source
- Nursing Reference Center
- Ovid Nursing
- Psychiatry Online
- PsycINFO

- PubMed
- Sage Journals
- Science Direct: Elsevier Journals

The library would add books and periodicals to its extensive collection that are specific to medicine and the PA profession. This initial purchase totaling about $20,000 was based on a review of the major medical publisher websites, (e.g., McGraw-Hill, F.A, Davis, Slack, Wiley, and Elsevier) and examination of their recent publications. Even though students would have access to the needed books and journals because of the University System of Maryland and Affiliated Institutions consortium, which provides access to over 9 million items at 17 member libraries, the initial purchase is recommended with $5,000 allotted yearly for books and/or database subscriptions. In addition, the Eastern Academic Libraries Trust (EAST) print archive guarantees access to 6 million volumes via Interlibrary Loan.

## K. Adequacy of Physical Resources, Infrastructure, & Instructional Equipment

Notre Dame Maryland University has adequate facilities to support this degree program. Moreover, the campus master plan has designated renovations for Knott science building beginning in FY2021 that will further enhance the physical resources, infrastructure and equipment availability. Below include examples of specialized campus resources that will support teaching and learning:

a. Two prioritized lecture classrooms used 5 days/week, 8 hours per day. Both are planned to be wireless with movable classroom tables and chairs for up to 35 students. Each will have projectors and whiteboards.
b. Small group meeting rooms to accommodate 5-6 research groups. Small group meeting rooms will be wireless and have a conference table with chairs for 10 people, projector, and whiteboard.
c. A clinical lab would house the instructional appliances/equipment, space for physical diagnosis instruction, teaching of common medical procedures such a venipuncture, nasogastric tube insertion, sonography, suturing, and casting, splinting and orthopedic equipment. There will be movable classroom tables and chairs for up to 35 students with a teacher desk or instructional station. There will be storage for equipment, supplies, and basic science (anatomy) teaching, including an Anatomage™ teaching table. This laboratory classroom will have projector, white boards and wireless capability.
d. Pediatrics lab will house pediatric equipment and devices suspended from ceiling to hold body weight. There is storage for supplies and equipment, including assistive technology. There are movable classroom tables and chairs for up to 35 students with a

teacher desk or station.

e. The Center for Caring with Technology in the School of Nursing is a realistic and risk-free environment for MSPA students to practice skills and develop clinical reasoning and is a way to develop interprofessional teaming skills with nurse practitioner students. The Center for Caring with Technology is an 8,300 square foot space that includes an array of learning spaces: two health assessment and adult medical-surgical labs; and a pediatric lab with a home health component, and two examination rooms. The Center is equipped with a state-of-the-art audio/visual capture system.

**Instructional resources**

**Course/Learning Technology:** NDMU has technology, support, and expertise to offer courses across a variety of modalities including face to face and hybrid. There is a staffed Faculty Resource Center and instructional course design support. In addition, NDMU has a state-of-the art global classroom that supports superior web conferencing, internet collaboration across institutions, mobile screen sharing, HD resolution, video collaboration, and the ability to build collaboration-enabled Zoom conference rooms. NDMU supports a Moodle-based Course/Learning Management System (C/LMS) where faculty may deposit course materials, facilitate online instruction, quizzes and exams, host chat and discussion board collaboration, and engage with students outside of the classroom to enrich the learning experience.

The entire campus hosts a wireless community to support mobile and web-based collaboration and communication. NDMU also supports learners with a well-staffed and supportive technology helpdesk.

**Specialized Equipment:** Specific equipment for the MSPA Program due to the course sequence would need to be purchased at the beginning of year one and year two, thereby spreading costs over two years. See the budget below for a list of equipment categories and corresponding expenditures.

**Current Equipment used in BIO 201, 281, 202, 282 Human Anatomy & Physiology I and II** will be available for instructional use in the MSPA program. These courses currently service Nursing students, Radiological Science majors, and students interested in attending Pharmacy School and Physical Therapy School. These courses utilize microscopes, histological slides, and anatomical models. In addition, the ADInstruments DAQ device and physiological equipment are used for recording EEGs and EKGs. This same equipment could be used in the relevant occupational therapy courses related to neuroscience of occupations and biomechanics of occupations. More than likely a few more models will need purchasing.

**E-Value:** Clinical education resources include the use of E-Value, which is already available for pharmacy students, in order for MSPA students to document their clinical or practicum hours. In addition, the following clinical contracts exist that meet some of the need for clinical training sites in the Baltimore and central Maryland region. The PharmD Program has contracts in 46 hospitals and 3 long-term care facilities. Nursing has dozens of contracts in Hospitals, 1 contract in a Psychiatric Hospital, 1 contract with a Hospice Center, 5 Long-term care contracts, 4 contracts with a variety of community groups, 2 Physician/Clinic Groups, 2 Health Center/Clinics, 1 with the Health Department, and 1 with a Home Health Agency. The School of Education at NDMU has numerous contracts with school systems as does Nursing. The clinical coordinator hired for the MSPA Program before the actual launch is tasked to develop and secure affiliation agreements to ensure availability of qualified teaching personnel (including physicians, residents, PAs, advanced practice nurses, and others) for SCPEs (supervised clinical practice experiences), and will subsequently secure for an affiliation agreement and secured training slots for the incoming class. New sites are added to reduce any gaps in placement opportunities to ensure that sites are available that cover acute care, chronic care, emergency, and population health and wellness.

## L. Adequacy of Financial Resources

### Projected Enrollment

| Summer 2022 | Summer 2023 | Summer 2024 | Summer 2025 | Summer 2026 |
|---|---|---|---|---|
| 30 | 65 | 65 | 65 | 65 |

### Projected Graduates

| May 2024 | May 2025 | May 2026 | May 2027 | May 2028 |
|---|---|---|---|---|
| 28 | 33 | 33 | 33 | 33 |

| TABLE 1: Revenue | | | | | |
|---|---|---|---|---|---|
| **Resource Categories** | **2021 Preparation** | **2022** | **2023** | **2024** | **2025** |
| 1. Reallocated [a] | 624,120 | 0 | 0 | 0 | 0 |
| 2. Tuition/Fee Revenue [b] | 0 | $1,275,000 | $2,845,375 | $2,930,720 | $3,018,600 |
| a) # F/T Students | 0 | 30 | 65 | 65 | 65 |
| b) Annual Tuition/Fee Rate | 0 | $42,500 | $43,775 | $45,088 | $46,440 |
| c) Annual F/T Revenue (a x b) | 0 | $1,275,000 | $2,845,375 | $2,930,720 | $3,018,600 |
| d) # P/T Students | 0 | 0 | 0 | 0 | 0 |

| | | | | | |
|---|---|---|---|---|---|
| 3. Grants, contacts, & other external sources [c] | 0 | 0 | 0 | 0 | 0 |
| 4. Other Sources (Fees) [d] | 0 | $11,400 | $25,350 | $26,000 | $26,650 |
| TOTAL (add lines 1-4) | 624,120 | $1,286,400 | $2,870,725 | $2,956,720 | $3,045,250 |

**Resources Narrative**

a. In year 1 (2021), funds will be reallocated to support this proporsed program. Assumes that the initial site visit date from ARC-PA will occurring the spring/summer of 2022.

b. Tuition and Fee Revenue: All students will be full-time and will enroll at $42,500 per year beginning in 2022. This figure is based on research of existing tuition rates for comparable PA programs in the mid-Atlantic region in private universities. Revenue and expense budgets for the PA program candidacy application year, and the first four years of the program is based on yearly admission of 30 students in the first cohort and 35 in subsequent cohorts spread over the 5-year provisional accreditation period. Tuition will is estimated to increase 3% each year.

c. Grants and Contracts: There is an ongoing grant award program available through the US Health Resources and Services Administration to accredited PA program who meet certain priority requirements. The near-term plan for the program will not rely upon grants or contracts to make this program viable.

d. Other Sources: Each enrolled student will be charged a technology fee of $190.00 in the fall and spring semesters ($380.00 per year). The technology fee will increase $10 year.

| **TABLE 2: PROGRAM EXPENDITURES:** | | | | | |
|---|---|---|---|---|---|
| **Expenditure Categories** | **2021** | **2022** | **2023** | **2024** | **2025** |
| 1. Faculty (b + c below) | 453,120 | 505,800 | 723,820 | 745,838 | 757,914 |
| a. Number of FTE | 3 | 3.2 | 4.75 | 4.75 | 4.75 |
| b. Total Salary | 354,000 | 400,000 | 582,000 | 601,638 | 611,304 |
| c. Total Benefits | 99,120 | 105,800 | 141,820 | 144,200 | 146,610 |
| 2. Admin. Staff (b + c below) | 64,000 | 65,280 | 130,560 | 133,120 | 135,680 |
| a. Number of FTE | 1 | 1 | 2 | 2 | 2 |
| b. Total Salary | 50,000 | 51,000 | 102,000 | 104,000 | 106,000 |
| c. Total Benefits | 14,000 | 14,280 | 28,560 | 29,120 | 29,680 |
| 3. Support Staff (b + c below) | 46,000 | 46,000 | 48,000 | 50,000 | 52,200 |

| | | | | | |
|---|---|---|---|---|---|
| a. Number of FTE | .2 | .2 | .2 | .2 | .2 |
| b. Total Salary | 46,000 | 46,000 | 48,000 | 50,000 | 52.000 |
| c. Total Benefits | 0 | 0 | 0 | 0 | 0 |
| 4. Technical Support and Equipment | 0 | 51,560 | 41,500 | 15,500 | 13,500 |
| 5. Library | 0 | 20,000 | 20,000 | 10,000 | 10,000 |
| 6. New or Renovated Space | 0 | 28,000 | 28,000 | 2,000 | 2,000 |
| 7. Other Expenses | 61,000 | 81,000 | 173,000 | 73,000 | 73,000 |
| TOTAL (Add 1 – 7) | 624,120 | 797,640 | 1,164,880 | 1,029,458 | 1,044,094 |

**Expenditures Narrative**

a. The benefit costs and salaries cover the program director, didactic coordinator, clinical coordinator and the part-time medical director. Other instructional and clinical faculty will be hired on a part-time basis to teach basic science and behavioral science courses. One administrative staff will be hired in year 1 and a second administrative staff hired in year 3. Fringe benefits calculated using a formula of 28% of salary.

b. The budget includes the one-time capital expenditures spread out over two years to renovate two labs. Additional rennovations will be included as part of a larger campus master plan renovation project.

c. Other Expenses include faculty travel, accreditation costs, consultant costs, instructional resources, Honoria for guest speakers with special expertise are identified, and other administrative related expenses (supplies, copying, etc.). Major expense incurred in Year 3 is the Anatomage™ teaching table.

## M. Adequacy of Provisions for Evaluation of the Program

The MSPA Program will use a program evaluation model that describes expected outcomes and evaluation methods. Methods of assessment include both qualitative and quantitative measures and provide formative data throughout the students' progression in the Program as well as summative data, reflecting the cumulative experience. The assessment plans that will be in place for the MSPA program are integrated closely with the Program Evaluation model that is used for external accreditation for the University and/or ARC-PA as it applies. The primary purpose of on- going assessment is to provide a positive teaching/learning environment in which the goals of the programs are aligned with the mission of the University and are meeting the needs of the community. To that end, it is necessary to assess all facets of the programs and make appropriate modifications so that students can be successful. Assessment activities are embedded in all aspects of the programs

so that evaluation is an integrated part of these programs and is feasible to accomplish. The Program establishes program effectiveness through the graduation of outstanding PAs who will be successful in their careers.

Specific Program effectiveness goals include:

**Academic excellence**

MSPA Program faculty in the program will be recognized at the university and national levels for quality of their work, leadership in PA education, and advancement of the physician assistant profession through excellence in teaching, scholarship, and service.

1. The MSPA Program will attract and support highly qualified and diverse faculty who align with the mission and vision of the University.
2. All MSPA Program faculty in the program will have an overall rating above the mean on the faculty evaluations in each of their classes. The program director of the program will review faculty evaluations and communicate recommendations for improvement as needed to hold faculty to high standards for teaching.
3. All MSPA Program faculty in the program will meet the majority (85% or greater) of their faculty development goals in teaching, scholarship and service every year, through an individualized planning process with their respective program director.

Student clinical year education, as well as the capstone performance in the program will be consistently excellent and reflect a strong academic foundation and development of professional behaviors.

4. 100% of MSPA Program students will successfully pass their supervised clinical practice experiences (SCPE) experiences.
5. Less than 5% of MSPA Program students will require SCPE remediation.
6. 95% of students will report satisfaction with their SCPEs and its congruence with the MSPA program.
7. 95% of MSPA Program students will report satisfaction with the process of coordination and administrative effectiveness (preparation, assignment, communication)
8. 95% of students of the MSPA program will report satisfaction with the capstone preparation, experience, and project process.

Graduates from the MSPA program will report that they met their educational, vocational, and personal needs and expectations for professional development. Students will report satisfaction with the courses, curriculum, and program.

9. The mean agreement rating for meeting curriculum learning goals will be 4 on a 5- point scale.

10. Qualitative feedback will be generally positive with some constructive suggestions for changes.
11. The mean agreement rating for course objectives, materials, and activities will be 4 on a 5-point scale for each course in the curriculum.

Professional Attitudes and Behaviors

12. 100% of MSPA students will progress in the program by demonstrating appropriate professional attitudes and behaviors throughout the program.

Student's success in earning their MSPA degree

13. 95% of MSPA students who start the program will graduate.

**Qualification of graduates**

Graduates of the NDMU MSPA Program will have the following performance expectations:

1. Will have an 90% first time taken pass rate on the PANCE examination
2. At least 20 students of the MSPA program will report that they obtained employment within 6 months of graduation.

Employer satisfaction

3. Employer satisfaction will be good to very good with a response rate of at least 25% for students in the MSPA program.

**Operating Effectiveness**

Daily operations will support efficiency and effectiveness of both internal systems and intra- university systems.

1. The Plan of Study for the MSPA program support student advancement through the program.
2. Faculty are satisfied with their course assignments in the MSPA program.
3. Students in the MSPA program report the support services (i.e. admissions, financial aid, IT, bookstore) have been helpful and effective.

**Financial Performance**

The MSPA Program is consistently financially sustainable and viable within the University.

1. The MSPA program will strive for maximal enrollment and retention.
2. Monitor student perceptions of curricular "value" in the MSPA program,
3. Monitor tuition rates and degree requirements in relation to key competitors for the MSPA program.
4. Track program income for the MSPA program over direct expenses on an annual basis.

**Marketing effectiveness**

The MSPA Program will be highly visible.

1. Marketing materials are current and compelling (websites, brochures, information flyers)
2. The MSPA Program is regularly exhibited at local and national conferences. Recruitment of diverse students will be an important admissions policy.
3. The MSPA program will have increasingly more diverse students each year. (Men, students of color, disability status, etc.)

**Student Learning Effectiveness**

**STUDENT LEARNING GOALS FOR THE PHYSICIAN ASSISTANT PROGRAM**

The MSPA student learning objectives are connected with the accreditation content standards established by the Accreditation Review Commission for the Physician Assistant (ARC-PA). The specific learning objectives are measured regularly. Upon completion of the MSPA Program, the graduate will have met all of the learning goals and demonstrated professional behaviors as a professional occupational therapist.

**Program Goal 1:** The graduates of the program will demonstrate the knowledge, skills, and attitudes of a PA medical provider of individuals, populations, and communities through a holistic and personalized understanding of occupational performance in varied, complex, or everyday contexts.

Student Learning Outcomes:

- The graduate will apply clinical medical science theory and evidence to selection and skillful implementation of evaluation approaches and interventions to achieve expected outcomes related to the medical care of individuals, populations, and communities.
- The graduate will apply therapeutic use of basic medical science in order to facilitate the role performance in the home, workplace, community, and other settings in which individuals and populations participate.
- The graduate will affect the health, well-being, and quality of life of individuals, populations, and communities through engagement in occupations and activities that address physical, cognitive, psychosocial, sensory, and spiritual aspects of performance embedded in context.

**Program Goal 2:** The graduates of the MSPA program will be scholars and educators in the science of physician assistant practice, evidence, quality improvement, and implementation science to promote health care and human

services that are client and family-centered and lead to valued outcomes for excellent service delivery.
Student Learning Outcomes:

- The graduate will engage in life-long learning and professional development to remain current with the evidence in the profession, healthcare, and human services.
- The graduate will demonstrate knowledge of the research, theory development, evidence-based practice, and education processes appropriate to continuous improvement of practice.
- The graduate will synthesize and disseminate advanced knowledge through the capstone process and experience.

**Program Goal 3:** The graduates of the MSPA program will be innovators, leaders, and advocates of socially and culturally responsible and inclusive healthcare and human services on behalf of the public; local, national and global communities; and the profession of physician assistant.

Student Learning Outcomes:

- The graduate will uphold the ethical standards, values, and attitudes of the physician assistant profession in leading and managing services.
- The graduate will effectively collaborate to affect patient-centered care through engagement with interprofessional teams and through the supervision according to standards and licensure requirements of physician assistants.
* The graduate will demonstrate leadership through knowledge of systems and public policy and of the change and innovation process in the advocacy for access to effective physician assistant services.

**STUDENT LEARNING OUTCOME ANALYSIS FOR THE PHYSICIAN ASSISTANT PROGRAM**

The MSPA student learning outcomes for the program is evaluated through course level evaluation, curricular level evaluation, scholarship production, and fieldwork/practicum and capstone/advanced scholarship performance.

***Course-level evaluation:***
Successful completion of course assignments and passing the course with a grade C+ or above is one indicator of student learning. However, students must maintain a 3.0 average each semester to avoid probation and/or program dismissal. The specific learning outcomes identified by the MSPA programs are tracked throughout the curriculum and mapped to specific courses, objectives, and assignments. The learning outcomes are emphasized in multiple courses, in a variety of ways, reinforcing the strength and breadth of the learning opportunities.

The MSPA faculty of the program will meet weekly to discuss curriculum and other programmatic issues. Students and faculty will evaluate every MSPA course the first time it is taught and every other year thereafter. Students will indicate how well they met the course objectives and give feedback on other components of the course (books, resources, assignments). Faculty will evaluate each course they teach for the first time (and every-other year thereafter) for its strengths and weaknesses and provide suggestions for revisions. The MSPA program director will summarize this feedback in an annual report for both programs and will discuss it with their respective faculty.

***Curricular-level evaluation:***

The MSPA program director will survey students prior to graduation for feedback on the curriculum and their overall educational experience. Students will complete both a quantitative survey about meeting program objectives, and they will be asked for qualitative feedback about the curriculum. This data will be summarized and reviewed regularly by the MSPA program director and their respective faculty. Trends in feedback will be used to inform changes in both programs.

***Fieldwork/Practicum and Capstone/Advanced Scholarship performance evaluation:***

Equally important is the fieldwork performance/practicum and capstone/advanced scholarship experience of students in the program. MSPA Program students participate in SCPEs. Students are evaluated directly by their fieldwork educators and must pass this portion of the curriculum in order to graduate. The mentor of the capstone experience and the capstone coordinator assess each student's performance in meeting the self-directed goals of the student's capstone experience and project. Likewise, the practicum mentors will assess each student's performance in terms of meeting self-directed learning goals.3

**N. Consistency with State Minority Achievement Goals**

Any student meeting the admissions requirements can apply to the MSPA program. The program will use a holistic admissions process that supports a diverse student body. The program will work to help all accepted students improve their workplace competitiveness and professional goals; an aim consistent with the State's minority student achievement goals.

In addition, Notre Dame of Maryland University is proud to have a significant number of minority students. At present over 52% of the student body identifies as a minority student.

**O. Relationship to low productivity programs identified by the Commission**

Not Applicable

**P. Adequacy of Distance Education Programs (as outlined in COMAR 13B.02.03.22)**

The MSPA program will be offered through a mixed modality including face-to-face and hybrid courses. NDMU is fully eligible to provide distance education. The University has a long history of providing high-quality distance education whose programs have been reviewed and approved by MHEC. In accordance with the C-RAC Guidelines as outlined in COMAR 13B.02.03.22C, any online aspects of the program curriculum will meet the same level of rigor and follow the same administrative structures and class policies as traditional face-to-face content.

NDMU utilizes *Quality Matters*™ standards of online curricular design. All faculty hired to teach in the MSPA program and prior to offering any professional PA courses online will provide either proof of experience with online teaching and/or will receive training with the online platform and tools if these tools are unfamiliar. Faculty will also be trained using the *Quality Matters*™ principles of best practice for online teaching and learning.

Regular training in the teaching/learning management platform, online course design (*Quality Matters*™), design of learning objects, and online course management will be available. An instructional designer works with the MSPA Program faculty prior to launch and during the first year of the launch will work with faculty to ensure that online curriculum design is consistent throughout each course and incorporates the mission components of the NDMU.

Students enrolled in online courses are provided information prior to enrollment about hardware, software, and IP provider issues prior to admission. The orientation at the beginning of the program verifies student identity and provides student ID badges needed for course enrollment and participation, as well as engages students in a sample online course with introduction to online services. Students enrolled in online courses receive reasonable and adequate access to the range of student services, and a 24-hour help desk to support their education activities. All students, regardless of the modality of content delivery have access to advisors to support clarity of curricular and online community expectations; access to library resources, e-books, and databases; and access to faculty, advisors, and support services.