

Doctor of Medical Science (DMSc)

ADMISSIONS INFORMATION

The Doctor of Medical Science program is designed to be a postgraduate program for PAs who are, or have previously been certified or licensed to practice as a PA. Persons eligible to matriculate in this program must satisfy all of the following criteria:

1. The applicant is a currently certified/licensed physician assistant or, if retired, previously certified/licensed to practice as a PA.
2. Completion of a master's degree from an accredited university recognized by the Department of Education.
 - Applicants who graduated from a university outside the United States may be required to provide a degree equivalency evaluation.
 - PAs without a master's degree may be eligible for the [master's equivalency option*](#). See below for equivalency requirements.
3. Candidates must have achieved a minimum overall graduate cumulative GPA of 3.0 (on a 4.0 scale).
4. The applicant must submit transcripts from qualifying degree institution(s), to include at least:
 - Transcript showing completion of physician assistant program of study
 - Transcript showing completion of a graduate degree (if physician assistant program did not confer a graduate degree)
5. Applicants who have graduated from a foreign college or university should submit acceptable evidence of U.S. degree/course equivalency. All course work taken at the foreign institution must be evaluated for American institution equivalence by one of the following services:
 - [World Education Services](#) P.O. Box 5087 Bowling Green Station New York, NY 10274-5087 p: (212) 966-6311 f: (212) 739-6139 info@wes.org
 - Educational Credential Evaluators, Inc. P.O. Box 514070 Milwaukee, WI 53203-3470 (414) 289-3400
 - [American Assn. of Collegiate Registrars & Admissions Officers](#) One Dupont Circle, NW, Suite 520 Washington, DC 20036-1135 (202) 293-9161
 - [Josef Silny & Associates, Inc. International Education Consultants](#) 7101 SW 102 Avenue Miami FL 33173 p: (305) 273-1616 f: (305) 273-1338 info@jsilny.com
 - [Intl. Education Research Foundation, Inc.](#) PO Box 3665 Culver City, CA 90231-3665 (310) 258-9451
6. The applicant must complete an admissions application, to include at least:
 - A current and comprehensive curriculum vita
 - Non-refundable application fee
7. The applicant must be fluent in English (the language of instruction of this program). When the applicant speaks and/or writes in English as a second language, the applicant must submit Test of English as a Foreign Language (TOEFL) scores for review.
 - Acceptable minimal TOEFL scores for ATSU-ASHS applications are:
 - Internet-based total score = 80
 - Acceptable IELTS score is an overall band score of 6.5
8. Applicants who speak and/or write English as a second language who have previously graduated from a college or university accredited by the U.S. Department of Education with a bachelor's degree (or higher) are exempt from this requirement.
9. Applicants who believe the TOEFL requirement should be waived may petition the Physician Assistant Department chair in writing.
10. The applicant must be able to meet [University technology requirements](#) during the entirety of the doctoral program.

***Master's Equivalency Option:**

To meet the [master's equivalency](#) the PA applicant MUST have a bachelor's degree in physician assistant studies AND meet and document in a portfolio at least one (1) of the criteria below:

- An approved military or civilian post-professional PA residency or fellowship
- An approved medical specialty certificate program (i.e. public health certificate)
- A Certificate of Added Qualification (CAQ) offered by the NCCPA
- At least 15 credit hours of post-secondary education toward a master's degree

Doctor of Medical Science (DMSc)

Each semester (Fall and Spring) contains two (2) 10-week blocks; B1=Block 1; B2=Block 2;
Fall Semester begins in July; Spring Semester begins in January

Two (2) Year Completion Plan

2-Year DMSc: FALL Semester Start		2-Year DMSc: SPRING Semester Start	
Sem/Block	Course # and Title	Sem/Block	Course # and Title
Fall-B1	CORE Pre-Req: DMSC 7000 Medical Writing	Spring-B1	CORE Pre-Req: DMSC 7000 Medical Writing
Fall-B1	CORE or Concentration Track Course	Spring-B1	CORE or Concentration Track Course
Fall-B2	CORE Pre-Req: DMSC 7030 Research Methods	Spring-B2	CORE Pre-Req: DMSC 7030 Research Methods
Fall-B2	CORE or Concentration Track Course	Spring-B2	CORE or Concentration Track Course
Spring-B1	8300 Capstone I	Fall-B1	8300 Capstone I
Spring-B2	CORE or Concentration Track Course	Fall-B2	CORE or Concentration Track Course
Spring-B2	CORE or Concentration Track Course	Fall-B2	CORE or Concentration Track Course
Fall-B1	8310 Capstone II	Spring-B1	8310 Capstone II
Fall-B2	CORE or Concentration Track Course	Spring-B2	CORE or Concentration Track Course
Fall-B2	CORE or Concentration Track Course	Spring-B2	CORE or Concentration Track Course
Spring-B1	8320 Capstone III	Fall-B1	8320 Capstone III
Spring-B2	CORE or Concentration Track Course	Fall-B2	CORE or Concentration Track Course

Three (3) Year Completion Plan

3-Year DMSc: FALL Semester Start		3-Year DMSc: SPRING Semester Start	
Sem/Block	Course # and Title	Sem/Block	Course # and Title
Fall-B1	CORE Pre-Req: DMSC 7000 Medical Writing	Spring-B1	CORE Pre-Req: DMSC 7000 Medical Writing
Fall-B2	CORE or Concentration Track Course	Spring-B2	CORE or Concentration Track Course
Spring-B1	CORE or Concentration Track Course	Fall-B1	CORE or Concentration Track Course
Spring-B2	CORE or Concentration Track Course	Fall-B2	CORE or Concentration Track Course
Fall-B1	CORE or Concentration Track Course	Spring-B1	CORE or Concentration Track Course
Fall-B2	CORE Pre-Req: DMSC 7030 Research Methods	Spring-B2	CORE Pre-Req: DMSC 7030 Research Methods
Spring-B1	8300 Capstone I	Fall-B1	8300 Capstone I
Spring-B2	CORE or Concentration Track Course	Fall-B2	CORE or Concentration Track Course
Fall-B1	8310 Capstone II	Spring-B1	8310 Capstone II
Fall-B2	CORE or Concentration Track Course	Spring-B2	CORE or Concentration Track Course
Spring-B1	8320 Capstone III	Fall-B1	8320 Capstone III
Spring-B2	CORE or Concentration Track Course	Fall-B2	CORE or Concentration Track Course

Doctor of Medical Science (DMSc)

REQUIRED CORE COURSES (15 credit hours)

<p>DMSC 7000 - Medical Writing - 3 credit hours: This course examines, in practical terms, the elements required for successful publication of a journal article or health policy review. This course encourages good writing skills through choosing better words, writing better sentences, and preparing better tables, graphs, and photographs. All students are required to develop and submit a quality paper that meets the requirements for publication in a peer-reviewed professional or biomedical journal. The learner will demonstrate the ability to effectively organize and structure information in written form. <i>Pre-requisite: Must be taken in the first block of the program.</i></p>	<p>DMSC 7010 - Community Assessment & Health Promotion - 3 credit hours: This course will introduce the Community Health Assessment (CHA) as a key component of evaluating the broader community health improvement process. Students will learn to objectively analyze community health data to identify priority issues, develop and implement effective health promotion strategies, and measure the effect of community health initiatives on a variety of community health indicators. Students will be exposed to current methods for conducting a community needs assessment. Discussions will center on choosing strategies that are culturally sensitive, clinically appropriate, and cost-effective.</p>	<p>DMSC 7020 - Social & Behavioral Determinants of Health - 3 credit hours: This course will serve as an introduction to the social, cultural, behavioral, and economic factors that influence health status and population health interventions. The practitioner will improve insights on 3 populations they have worked with or those they may work with in the future.</p>	<p>DMSC 7030 - Research Methods in Healthcare - 3 credit hours: This course will describe qualitative, quantitative and mixed methods research methodologies and the proper selection of methodology based on the research question. Additional topics include conducting a peer-reviewed literature review, critical analysis of study results and research methodologies, and ethical considerations in human subject's research. A variety of data collection and analysis strategies will be reviewed. <i>Pre-requisite: Must be taken before Capstone I.</i></p>	<p>DMSC 7040 - Quality Improvement in Healthcare - 3 credit hours: This course will include components of The Institute for Healthcare Improvement (IHI) curriculum to the prepare students to lead the development and maintenance of quality management in clinical and business settings. Students will develop foundational fluency in methods of healthcare data collection and industry-standard metrics of clinical quality and patient safety. Implementation analysis of quality improvement PDSA cycles, root cause, and systems analysis will also be reviewed. Through team-based learning, students will explore how quality metrics enable evidence-based clinical and business decision-making.</p>
--	---	---	--	---

Doctor of Medical Science (DMSc)

The **Capstone** courses are designed to instruct the learner in the process of developing and conducting an applied research project. The applied research project will be designed to target a problem in either clinical practice, the PA professional sphere, or PA education. During the capstone course sequence, the learner will work closely with their faculty advisor as they progress from conceptualization to completion of their applied project.

REQUIRED CAPSTONE COURSES (9 credit hours)		
<p>DMSC 8300 - Capstone I - 3 credit hours: This three-course series is designed to instruct the learner in the process of developing and conducting an applied research project. The applied research project will be designed to target a problem in either clinical practice, the PA professional sphere, or PA education. During the capstone course sequence, the learner will work closely with their faculty advisor as they progress from conceptualization to completion of the research project. In Capstone I, the learner will apply methods from the Research Design in Healthcare course to develop a proposal for their applied research project. The student will also conduct a literature review around their chosen applied research topic.</p>	<p>DMSC 8310 - Capstone II - 3 credit hours: This three-course series is designed to instruct the learner in the process of developing and conducting an applied research project. The applied research project will be designed to target a problem in either clinical practice, the PA professional sphere, or PA education. During the capstone course sequence, the learner will work closely with their faculty advisor as they progress from conceptualization to completion of the research project. Capstone II will focus on the collection and analysis of data.</p>	<p>DMSC 8320 - Capstone III - 3 credit hours: This three-course series is designed to instruct the learner in the process of developing and conducting an applied research project. The applied research project will be designed to target a problem in either clinical practice, the PA professional sphere, or PA education. During the capstone course sequence, the learner will work closely with their faculty advisor as they progress from conceptualization to completion of the research project. Capstone III focuses on the final preparation and submission of a quality 3 product targeted at publication in the healthcare literature or presentation at a state or national level meeting. Each final applied research product will be reviewed and graded by the learner's faculty advisor.</p>

Doctor of Medical Science (DMSc)

The **Education** track is designed for PAs interested in developing teaching skills for clinical and academic environments. Students will learn: adult learning theory, how to develop and design curriculum, learn about cutting edge advances in educational technology, and understand educational assessments and evaluations.

EDUCATION TRACK COURSES (12 credit hours)			
<p>DMSC 8100 - Adult Learning Theory - 3 credit hours: Effective and efficient teaching requires an understanding of how adults learn. This course examines the learning process, particularly as it differs for adults. Topics include theories of behaviorism, cognitivism, humanism, constructivism, and social and adult learning; major learning style theories; andragogy versus pedagogy; and motivation for learning as it applies to informal and formal education and training. Utilizing this basis, students will examine how to apply these theories to the design, implementation, and assessment process.</p>	<p>DMSC 8110 - Curriculum Design & Delivery - 3 credit hours: This course will introduce students to methods and best practices for medical education curriculum design and prepare students to be conversant in the foundational research literature of education for adult students. Students will design systems-based learning modules within their medical specialty. An introduction to psychometric principles will prepare students to create high-quality assessment items.</p>	<p>DMSC 8120 - Educational Technology & Simulation - 3 credit hours: Computers, simulators, and even smartphones have become ubiquitous in education both in and outside of the classroom. This course will present best practices in utilization of technology in teaching and provide the learner the opportunity to learn course management through an LMS, develop familiarity with audience response technology (e.g., clickers), develop competence in office productivity software for common educational tasks, and explore hardware and software essential to producing asynchronous curriculum delivery and assessment (e.g., webcam, interactive publishing). Simulation is recognized in healthcare education as an effective way to teach and assess skills and behaviors. This course will teach the student how to create high-quality healthcare simulation programs, introduce the research behind simulation best practices, provide students with a template for effective simulation, and give students a basic understanding of the simulation process as it applies to healthcare education.</p>	<p>DMSC 8130 - Assessment & Evaluation Methods - 3 credit hours: This course will describe best practices for measurement and assessment in education. Topics will include the role of measurement and assessment in teaching, instructional goals and objectives, validity and reliability, classroom tests and assessments, standardized tests, and interpretation of assessment scores and norms. Learners will develop instructional objectives, a variety of assessment items and assessment formats, and will construct rating 3 scales, rubrics, and interpret assessment psychometrics.</p>

Doctor of Medical Science (DMSc)

The **Leadership** track provides PAs with foundational leadership knowledge that focuses on healthcare administration, economics, and healthcare policies. Students will learn: skills to lead organizational improvement in healthcare settings, explore topics influencing the markets on the healthcare system, discuss medical and ethical challenges faced in healthcare, human-subjects research, and privacy rights. PAs will also explore the evolving role and challenges of the PA in the healthcare system.

LEADERSHIP TRACK COURSES (12 credit hours)			
<p>DMSC 8200 - Organizational Leadership - 3 credit hours: This course will provide the learner with an understanding of how perceptions and thinking influence behavior in the workplace, and the skills necessary to manage conflict and lead change in teams, organizations, community partnerships, and health initiatives in their role as a physician assistant. Strategies for creative problem solving, communication and improved management practices will be explored.</p>	<p>DMSC 8210 - Health Economics - 3 credit hours: Economics is a major influence in shaping health policy in the United States. An effective healthcare leader must be fluent with the basic health economic theory to guide their organization. This course will discuss such topics as demand, supply and market equilibrium, scarcity, risk aversion, moral hazard, adverse selection, quality of care and pay for performance to provide the student with a grasp of the market forces on the U.S. healthcare system.</p>	<p>DMSC 8220 - Ethical & Legal Considerations in Health Administration - 3 credit hours: This course will provide an overview of the principles of medical ethics (autonomy, beneficence, and justice) and ethical theory. The discussion will review the ethical challenges faced in healthcare and health administration, the ethical requirements of human-subjects research, the right to privacy and the ethical decision-making process. The responsibilities and boundaries of the patient healthcare provider relationship and the conflicting demands of providing quality care with limited resources will be addressed, as will the relationship and responsibilities of healthcare providers to society. Case studies will be included to develop ethical reasoning skills applicable to daily practice.</p>	<p>DMSC 8230 - PAs in Healthcare Policy - 3 credit hours: This course will explore the evolving role of the PA in the structure of the current U.S. healthcare system; the challenges of access, cost, and quality; and the process of healthcare policy development. The evolution of healthcare reform will be used to illustrate the development of healthcare policy, including the Affordable Care Act (ACA). The impact of the ACA on PA practice, patient healthcare access, cost, and quality and projections for the future of the ACA will be analyzed.</p>

Doctor of Medical Science (DMSc)

The **Clinical** track allows students to customize a learning plan with structured learning experiences to develop additional medical knowledge and skills. The Learning Plan proposal defines the goals and outcomes the learner will achieve by the end of the four-course sequence. The practicum courses provide a blank canvas that allows the student to tailor the Learning Plan to their areas of interests. Patient contact hours are not required.

CLINICAL TRACK COURSES (12 credit hours)			
<p>DMSC 8300 – Clinical Practicum 1 - 3 credit hours: The first in a series of structured didactic and clinical practicum experiences to further the student’s clinical practice based on their approved Learning Plan. Each student will utilize both patient encounters and material from continuing medical education resources to develop targeted competencies from the Learning Plan.</p>	<p>DMSC 8310 – Clinical Practicum 2 - 3 credit hours: The second in a series of structured didactic and clinical practicum experiences to further the student’s clinical practice based on their approved Learning Plan. Each student will utilize both patient encounters and material from continuing medical education resources to develop targeted competencies from the Learning Plan.</p>	<p>DMSC 8320 – Clinical Practicum 3 - 3 credit hours: The third in a series of structured didactic and clinical practicum experiences to further the student’s clinical practice based on their approved Learning Plan. Each student will utilize both patient encounters and material from continuing medical education resources to develop targeted competencies from the Learning Plan.</p>	<p>DMSC 8330 – Clinical Practicum 4 - 3 credit hours: The final of course of the practicum series. Students will continue to utilize structured didactic and clinical practicum experiences to further their clinical practice based on their approved Learning Plan. Each student will utilize both patient encounters and material from continuing medical education resources to develop targeted competencies from the Learning Plan. At the completion of this course, the student should have attained all of the competencies outlined in the Learning Plan.</p>