



DELAWARE VALLEY UNIVERSITY

Physician Assistant Program

Course Descriptions & Credit Hour Requirements

The below courses are required elements of the Physician Assistant Program's curriculum. In total, students graduating from the Physician Assistant Program at DelVal will have completed 108 credit hours of work, distributed as follows:

Didactic Phase		Clinical Phase	
Fall II	14 credits	PA – Clinical Year (January – October)	38 credits
Spring I	10 credits		
Spring II	9 credits		
Summer I	8 credits		
Summer II	8 credits		
Fall I	9 credits		
Fall II (second year)	12 credits		

Clinical Anatomy & Physiology (4 credits): This course is designed to introduce students to the gross structure of the human body and the associated physiologic functions of all anatomic structures and organ systems. This course is taught regionally and will cover the back, anterior thoracic wall & breast, lungs, heart, superior and posterior mediastinum, abdomen, pelvis and perineum, male and female reproductive, head, neck, pharynx, larynx, upper limb, lower limb, and gluteal region; emphasizing all major visceral structures of each region, relationships/functional interrelationships of structures to one another, and innervation and vascular supply. The physiology and basic pathophysiology of each organ system will be presented. This course includes lecture and lab components.

Biomedical Sciences (4 credits): This course provides an overview of the genetic and molecular mechanisms of health and disease necessary to understand and practice clinical medicine. Modules in this course include normal and abnormal concepts in biochemistry and molecular biology, histology and cell biology, genetics, and immunology. Normal human physiologic functions and responses related to these modules will be explored and relevant clinical correlations will be discussed.

Evidence-Based Practice (2 credits): This course is designed to enable students to develop the skills to locate and critically appraise published medical research to answer clinical questions. Basic principles of medical research, study designs, scales of measurement and interpreting statistics will be discussed. This course will challenge students' critical thinking skills and facilitate the development of clinically-based research questions to promote instruction in how to integrate research with clinical practice. Instruction will be given in systematic methods for critical appraisal of study quality, research design and strength of recommendations. Evidence-based resources and databases for health professionals will be identified.



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Introduction to Pharmacology (2 credits): This course will introduce concepts fundamental to understanding how pharmacotherapeutic agents exert their effects, including physiologic and pharmacologic receptors, dose-response relationships, pharmacodynamics and pharmacokinetics including drug absorption, distribution, metabolism, and excretion, and the effect of drugs on the autonomic nervous system. Mechanisms responsible for drug effect, reactions, and interactions will be discussed. Finally, basic principles of clinical prescribing, such as considerations for special populations, drug ordering, prescription writing, and dose calculations will be addressed and common analgesic medications will be introduced.

Physician Assistant Seminar (1 credit): This course examines the history and role of the Physician Assistant profession and the contribution of physician assistants to the U.S. healthcare workforce. Standards of professionalism and academic/intellectual conduct will be explored. Necessary traits, skills, and strategies for successful practice as a physician assistant, including provider personal wellness and prevention of burnout, experiential service learning, and basic life support will be covered in this course.

Care Across the Lifespan (1 credit): This course provides an overview of normal and abnormal human development and appropriate health promotion and counseling to be provided by the physician assistant at all stages of the lifespan: newborn and infant, toddler, preschool and school-aged children, adolescents, adults, and elderly. The recommended schedule of well-visits and preventative care at each stage will be addressed. Normal and abnormal responses to stress, abuse, neglect, and violence, human sexuality, and death and dying are additional topics that will be explored in this course.

Laboratory & Diagnostic Medicine (2 credits): This course is designed to expose students to a variety of diagnostic and clinical procedures encountered in clinical practice. Students will learn how to order and interpret a variety of laboratory studies with regard for protocols for collection, factors that may interfere with results, indications, and contraindications. An introduction to common radiologic and imaging studies will be included in this course. Clinical procedures commonly performed or encountered by physician assistants in clinical practice will be introduced, with emphasis on indications, contraindications, risks/benefits, informed consent, and documentation.

Patient Evaluation & Counseling (3 credits): This course will prepare the physician assistant student to obtain and document both comprehensive and directed histories and basic physical examination (general assessment and vital signs) on patients with special sensitivity to gender, age, and cultural background. Students will learn methods to form therapeutic relationships with patients, educate and counsel patients related to their health condition and overcome barriers commonly encountered when communicating with patients, navigate difficult patient encounters, and delivering bad news. Students will begin to incorporate these skills in their developing clinical reasoning process.

Infectious Diseases (2 credits): This course prepares students to evaluate and manage patients with infectious diseases. The course will begin with an overview of clinical microbiology. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in infectious disease will be reviewed. There will be an emphasis on anatomy



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and physiology relevant to infectious diseases, patient evaluation and assessment, patient education, counseling, health promotion, and screening for/prevention of infectious diseases, pathophysiology, signs and symptoms, diagnosis, and treatment of infectious conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in microbiology and infectious disease, and pharmacologic and non-pharmacologic treatment of infectious disease with a special emphasis on antibiotic usage and stewardship. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Dermatology, ENT, and Ophthalmology (2 credits): This course prepares students to evaluate and manage patients with dermatologic, otolaryngologic, and ophthalmologic conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in these specialties will be reviewed. There will be an emphasis on anatomy and physiology relevant to the skin, head, eyes, ears, nose, and neck/throat, patient evaluation and assessment and the skin, ear, nose, throat, and eye examinations, patient education, counseling, health promotion, and screening related to dermatologic, ENT, and ophthalmologic disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of medical conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in these specialties, and pharmacologic and non-pharmacologic treatment of disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Principles of Public Health (1 credit): This course relates principles of public health, such health equity, disease surveillance, disease reporting, emerging global health conditions, patient advocacy, and public health interventions to the clinical practice of physician assistants. Students will be introduced to and develop an appreciation for the role of public health professionals in the U.S. healthcare system. Barriers to and considerations in health care for vulnerable populations, social determinants of health, and health disparities will be discussed.

Cardiology (4 credits): This course prepares students to evaluate and manage patients with cardiovascular conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in cardiology will be reviewed. There will be an emphasis on anatomy and physiology relevant to the cardiovascular system, patient evaluation and assessment and the cardiovascular examination, patient education, counseling, health promotion, and screening related to cardiac and peripheral vascular disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of cardiovascular conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in cardiology, and pharmacologic and non-pharmacologic treatment of heart and vascular disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.



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Pulmonology (2 credits): This course prepares students to evaluate and manage patients with pulmonary conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in pulmonary medicine will be reviewed. There will be an emphasis on anatomy and physiology relevant to the lungs, patient evaluation and assessment and the lung examination, patient education, counseling, health promotion, and screening related to respiratory disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of pulmonary conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in pulmonology, and pharmacologic and non-pharmacologic treatment of lung disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Cultural Competence & Multicultural Healthcare (1 credit): This course will examine the influence of diversity, culture, and society on health care institutions. Students will develop strategies to interact with patients in a culturally competent manner and explore how language, gender, sexual orientation, race/ethnicity, citizenship and immigration status, religion, and disability status can affect how health care is perceived, accessed, and provided. In addition, this course will concentrate on the importance of health care providers and institutions being culturally responsive.

Medicolegal Issues & Healthcare Ethics (1 credit): This course will prepare students to practice in accordance with the Ethical Standards for the PA Profession and provide an understanding of the tenets of biomedical ethics, including autonomy, nonmaleficence, beneficence, and justice. The principles will be applied to issues in healthcare including informed consent and medical decision making and issues specific to PA practice such as relationships with supervising physicians, confidentiality and reporting requirements, and rights of patients to refuse care. The course will also introduce the legal process in healthcare-related criminal, civil, and/or malpractice cases.

Primary Care Longitudinal SCPE (1 credit per term/5 credits total): The goal of this course is for students to build upon the knowledge and refine the skills learned in the other courses of the didactic year of the program. This course is designed to provide the student with the basic knowledge, skills, and attitudes necessary to build a solid foundation for the evaluation, documentation, diagnosis and treatment of problems common in the primary care setting. The focus of the course is spent with a physician, physician assistant, and/or nurse practitioner preceptor in a primary care setting and to observe the longitudinal clinical care provided to a consistent patient population over time. Through supervised exposure to patients in a primary care environment, the student is given the opportunity to apply, integrate, and affirm those skills necessary for becoming a certified physician assistant. The student will provide medical care to patients across the lifespan, to include infants, children, adolescents, adults and the elderly who present with acute and chronic health conditions and require preventive care. Emphasis is placed on the evaluation and management of primary care medical problems. Patient education and counseling are stressed, and the student is familiarized with the role of the physician assistant in a general practice setting.



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Gastroenterology (2 credits): This course prepares students to evaluate and manage patients with gastroenterologic and hepatic conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized by GI specialists will be reviewed. There will be an emphasis on anatomy and physiology relevant to the digestive system, patient evaluation and assessment and the abdominal examination, patient education, counseling, health promotion, and screening related to GI disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of GI conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in gastroenterology, and pharmacologic and non-pharmacologic treatment of GI disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Renal & Genitourinary (2 credits): This course prepares students to evaluate and manage patients with kidney, electrolyte, and/or urologic conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in renal and urologic settings will be reviewed. There will be an emphasis on anatomy and physiology relevant to the kidneys and genitourinary system, patient evaluation and assessment, patient education, counseling, health promotion, and screening related to renal and GU disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of renal, electrolyte, and urologic conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in nephrology and urology, and pharmacologic and non-pharmacologic treatment of kidney and GU disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Endocrinology (2 credits): This course prepares students to evaluate and manage patients with endocrine conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in endocrinology will be reviewed. There will be an emphasis on anatomy and physiology relevant to the endocrine system, patient evaluation and assessment, patient education, counseling, health promotion, and screening related to endocrine disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of endocrine conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in endocrinology, and pharmacologic and non-pharmacologic treatment of endocrine disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Health Systems Science I (1 credit): This is the first of a two-part series of courses designed to provide students a broad overview of the frameworks within which healthcare is delivered, health professional work together to deliver care, and how the health system can improve quality, delivery, and outcomes of patient care. This course will describe the U.S. healthcare system, financing and reimbursement for care, medical billing and coding, and the appropriate and effective use of health informatics.



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Hematology & Oncology (2 credits): This course prepares students to evaluate and manage patients with hematologic diseases and/or malignancy. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in hematology & oncology will be reviewed. There will be an emphasis on relevant anatomy and physiology, patient evaluation and assessment, patient education, counseling, health promotion, and screening related to hematologic and oncologic disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of blood conditions and malignancies commonly encountered in clinical practice, laboratory and diagnostic testing utilized in hematology/oncology, and pharmacologic and non-pharmacologic treatment of blood diseases and cancers. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Orthopedics & Rheumatology (2 credits): This course prepares students to evaluate and manage patients with musculoskeletal/orthopedic, rheumatologic, and autoimmune conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in orthopedics and rheumatology will be reviewed. There will be an emphasis on anatomy and physiology relevant to the musculoskeletal system, patient evaluation and assessment and musculoskeletal examinations, patient education, counseling, health promotion, and screening related to orthopedic and rheumatologic disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of orthopedic and rheumatologic conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in orthopedics and rheumatology, and pharmacologic and non-pharmacologic treatment of musculoskeletal, rheumatologic, and autoimmune disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Behavioral Medicine (2 credits): This course prepares students to evaluate and manage patients with psychiatric and mental/behavioral health conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in behavioral medicine will be reviewed. There will be an emphasis on anatomy and physiology relevant to behavioral health, patient evaluation and assessment and the mental status examination, patient education, counseling, health promotion, and screening related to psychiatric disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of psychiatric conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in mental health, and pharmacologic and non-pharmacologic treatment of psychiatric disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course.

Health Systems Science II (1 credit): This is the second of a two-part series of courses designed to provide students a broad overview of the frameworks within which healthcare is delivered, health professional work together to deliver care, and how the health system can improve quality, delivery, and



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outcomes of patient care. In this course, health administration, value-based care, healthcare delivery, quality improvement, patient safety, leadership, and teamwork will be discussed.

Neurology (2 credits): This course prepares students to evaluate and manage patients with neurologic conditions. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in neurology will be reviewed. There will be an emphasis on anatomy and physiology relevant to the nervous system, patient evaluation and assessment and the neurologic examination, patient education, counseling, health promotion, and screening related to neurologic disorders, pathophysiology, signs and symptoms, diagnosis, and treatment of neurologic conditions commonly encountered in clinical practice, laboratory and diagnostic testing utilized in neurology, and pharmacologic and non-pharmacologic treatment of nervous system disease. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course. This course covers diagnoses affecting patients across the lifespan.

Perioperative Care (2 credits): This course is designed to prepare the physician assistant student to care for patients in the perioperative setting. This includes pre-operative evaluation, principles of general surgery, anesthesia and post-operative care that will be given in the primary care and surgical settings by the physician assistant. Evidence-based medicine practice is weaved through the above areas where available and appropriate. This course covers diagnoses affecting patients across the lifespan from childhood through elderly that are cared for in a surgical setting.

Reproductive Medicine & Women's Health (2 credits): This course prepares students to evaluate and manage the reproductive and obstetric health of women. This course will cover prenatal, obstetric and gynecologic care. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in reproductive medicine and women's health will be reviewed. There will be an emphasis on anatomy and physiology relevant to care of the woman, patient evaluation and assessment, patient education, counseling, health promotion, and screening related to pediatrics, pathophysiology, signs and symptoms, diagnosis, and treatment of conditions commonly encountered in reproductive medicine and women's health clinical practice, laboratory and diagnostic testing utilized in pediatrics, and pharmacologic and non-pharmacologic treatment of reproductive medicine and women's health patients. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course.

Lifestyle Medicine (1 credit): In this course, students will be exposed to evidence-based principles for educating, equipping, and empowering patients to make lifestyle changes, including diet/nutrition, physical activity, sleep, stress management, social connections, and avoidance of risky substances and behaviors as a means to prevent, treat, or reverse chronic disease. Assessing readiness for change, motivational interviewing, and collaborative goal-setting with patients will be reviewed.



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Team-Based Practice (1 credit): This course was designed to provide the physician assistant student with the knowledge and skills to function as a member of an interprofessional healthcare team. This includes discussing the roles and responsibilities of the PA in a variety of healthcare settings and learning effective communication skills for interprofessional collaboration. Students will use evidence-based resources related to teamwork in the healthcare setting to analyze healthcare teams for effectiveness.

Clinical Phase Seminar (2 credits): The Clinical Phase Seminar course is delivered at the conclusion of the first (didactic) phase of the program and is designed to prepare students to transition from primarily classroom-based to primarily clinic-based learning and instruction. Professionalism, safety, roles, and expectations of PA students on clinical rotations will be discussed. Necessary clinical knowledge for each required rotation will be reinforced. Students will obtain hands-on practice related to commonly performed clinical skills, including but not limited to sterile technique, suturing, knot tying, catheterization, venipuncture, and IV insertion. Finally, students will receive Advanced Cardiac Life Support certification.

Emergency Medicine (2 credits): This course is designed to prepare the physician assistant student for evaluating, managing, and providing treatment to patients with unexpected injury and illness. General concepts needed for the physician assistant to function in emergency medicine, urgent care, as well as primary care settings are presented. The course emphasizes stabilization of emergency conditions, medical management, and emergency procedures. Evidence-based medicine practice is integrated throughout the above areas where appropriate. This course will complement the other concurrent courses this semester and help to integrate the knowledge developed in previous courses in the curriculum.

Pediatrics (2 credits): This course prepares students to evaluate and manage pediatric patients, including infants, children and adolescents. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in pediatric medicine will be reviewed. There will be an emphasis on anatomy and physiology relevant to care of the pediatric patient, patient evaluation and assessment, patient education, counseling, health promotion, and screening related to pediatrics, pathophysiology, signs and symptoms, diagnosis, and treatment of conditions commonly encountered in pediatric clinical practice, laboratory and diagnostic testing utilized in pediatrics, and pharmacologic and non-pharmacologic treatment of pediatric patients. Special considerations related to evidence-based medicine, genetics, public health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course.

Geriatrics (2 credits): This course prepares students to evaluate and manage geriatric patients. Background information, including epidemiology, the interprofessional team involved in care, settings of care, and common resources utilized in geriatric medicine will be reviewed. There will be an emphasis on anatomy and physiology relevant to care of the geriatric patient, patient evaluation and assessment, patient education, counseling, health promotion, and screening related to elderly patients, pathophysiology, signs and symptoms, diagnosis, and treatment of conditions commonly encountered in geriatric clinical practice, laboratory and diagnostic testing, and pharmacologic and nonpharmacologic treatment of geriatric patients. Special considerations related to evidence-based medicine, genetics, public



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health, medicolegal and ethical considerations, cultural beliefs, and the healthcare system will be integrated throughout the course.

Clinical Decision Making (3 credits): This course will focus on common medical symptoms encountered in the primary care setting and the process for collecting information from the patient to create a management plan. The Physician Assistant Program Faculty will facilitate the refinement of the development of a differential diagnosis and the steps involved in clinical decision making when confronted with a patient complaint in small and large group sessions. Students will be assigned topics for each class and should read in advance of class to prepare for class discussions and assessments. Students will develop an appreciation of case-based learning and systems-based practice issues.

Core Rotations (28 credits total): Students will complete required core rotations in seven (7) medical specialties: family medicine, internal medicine, women's health, pediatrics, behavioral health, surgery, and emergency medicine. During these core rotation courses, students will apply didactic knowledge to the hands-on provision of patient care. Students are expected to integrate knowledge obtained during the first year of the PA program to take histories, perform physical examinations, suggest and interpret appropriate diagnostic studies, observe and perform clinical procedures, develop treatment plans, and counsel/educate patients regarding these plans under the supervision of their clinical preceptor.

Elective Rotations (6 credits total): Students will complete elective rotations in three (3) medical or surgical specialties or subspecialties, assigned based on student strengths and weaknesses, preferences, goals, and availability. These elective rotations allow students to supplement their knowledge in fields of interest, strengthen clinical knowledge, and explore potential career paths. Students will apply didactic knowledge to the hands-on provision of patient care. Students are expected to integrate knowledge obtained during the first year of the PA program to take histories, perform physical examinations, suggest and interpret appropriate diagnostic studies, observe and perform clinical procedures, develop treatment plans, and counsel/educate patients regarding these plans under the supervision of their clinical preceptor.

Senior Seminar (4 credits): The Senior Seminar course is delivered during on-campus sessions throughout the clinical phase of the physician assistant program. Students return to campus from clinical rotations and engage in didactic learning, practice clinical procedural skills, deliver case presentations to peers and faculty in the PA program, complete formative and summative simulation activities and take a summative written examination. At the conclusion of this course, achievement of program learning outcomes and competencies will be assessed and readiness for graduation and clinical practice ensured.