

# PHYSICIAN ASSISTANT EDUCATION (PAED)

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## **PAED 5010 - Professional & Psychosocial Issues of Physician Assistant Practice**

3 Credits

This course explores the PA profession and potential issues inherent in the PA health care provider role. It addresses the psychosocial dynamics of health care, personal biases that may impact the provision of patient care, and the fundamentals of health care delivery systems. It also explores the professional resources available to PAs, state and national PA organizations and their roles, as well as the various health professionals a PA may interact with as part of a team.

## **PAED 5040 - Physiology**

4 Credits

This is a comprehensive clinically-based human physiology course that covers all major systems of the human body. The course provides a depth and breadth of foundational knowledge that prepares students for further coursework examining pathophysiology, clinical manifestations of disease, and the diagnosis and treatment of patients.

## **PAED 5070 - Principles of the Medical Interview**

2 Credits

This course focuses on the medical interview as a clinical skill. The various components of the medical history are presented as well as techniques for effective medical interviewing. Communication with patients and building rapport are examined as essential components. Students also learn medical documentation skills and are introduced to oral patient presentations. Fundamental medical terminology is explored as is the impact of medical genetics on the patient history.

## **PAED 5110 - Dermatology Fundamentals**

2 Credits

This course encompasses the pathophysiologic basis of dermatologic disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal dermatologic anatomy and physiology, progresses through pathophysiology and the clinical features of disease both local and systemic, and focuses on patient evaluation, differential diagnosis, and treatment specific to dermatologic diseases.

## **PAED 5120 - Hematology Fundamentals**

2 Credits

This course encompasses the pathophysiologic basis of hematologic disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal anatomy and physiology related to the hematologic system, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to hematologic diagnoses.

## **PAED 5130 - Otorhinolaryngology and Ophthalmology Fundamentals**

3 Credits

This course encompasses pathophysiology involving the head, eyes, ears, nose, and throat. It includes the clinical manifestations of disease and explores the system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to diagnoses of the head, eyes, ears, nose, and throat.

## **PAED 5140 - Clinical Procedures I**

1 Credit

PAED 5140: Clinical Procedures I is the first of a three-course series that introduce students to common medical procedures they may be included in their duties as a practicing PA. This practical, hands-on course is comprised of lectures, videos, and practical laboratories that loosely follow along with the ten fundamental organ-system based courses ("the modules") and the five population/discipline-based "Essentials" courses. This course interweaves technical skills with concurrently taught clinical material and prepares students to successfully perform procedures during the clinical phase of the program. As they move forward toward the provision of patient care, successful completion of these practical courses helps assure that they have the technical skills to function effectively as members of the health care team.

### **Restrictions:**

Enrollment is limited to students with a major in Physician Assistant.

## **PAED 5150 - Clinical Pharmacology I**

2 Credits

This is the first of two clinically-based pharmacology courses covering the fundamentals of system-based pharmacokinetics and pharmacodynamics with an emphasis on pharmacotherapy. It explores essential physiology and pathophysiology and focuses on appropriate medications for the treatment of various clinical conditions. There is an emphasis on the mechanism, absorption, metabolism, excretion, and toxicity of the major classes of drugs used in medicine, as well as pharmacotherapy for common medical problems.

## **PAED 5201 - Clinical Pharmacology II A**

1 Credit

This is a continuation of Clinical Pharmacology I and is a clinically-based pharmacology courses covering the fundamentals of system-based pharmacokinetics and pharmacodynamics with an emphasis on pharmacotherapy. It explores essential physiology and pathophysiology and focuses on appropriate medications for the treatment of various clinical conditions. There is an emphasis on the mechanism, absorption, metabolism, excretion, and toxicity of the major classes of drugs used in medicine, as well as pharmacotherapy for common medical problems.

### **Restrictions:**

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5202 - Clinical Pharmacology II B**

1 Credit

This is a continuation of Clinical Pharmacology IA and is a clinically-based pharmacology courses covering the fundamentals of system-based pharmacokinetics and pharmacodynamics with an emphasis on pharmacotherapy. It explores essential physiology and pathophysiology and focuses on appropriate medications for the treatment of various clinical conditions. There is an emphasis on the mechanism, absorption, metabolism, excretion, and toxicity of the major classes of drugs used in medicine, as well as pharmacotherapy for common medical problems.

**Restrictions:**

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5211 - Pulmonary Fundamentals I**

2 Credits

This course encompasses the pathophysiologic basis of pulmonary disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal pulmonary/respiratory anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to pulmonary diagnoses. Course content continues in Pulmonary Fundamentals II.

**Restrictions:**

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5212 - Pulmonary Fundamentals II**

1 Credit

This course is a continuation of Pulmonary Fundamentals I. It encompasses the pathophysiologic basis of pulmonary disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal pulmonary/respiratory anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to pulmonary diagnoses.

**Restrictions:**

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5221 - Cardiovascular Fundamentals I**

2 Credits

This course encompasses the pathophysiologic basis of cardiovascular disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal cardiovascular anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to cardiovascular diagnoses. Course content continues in Cardiovascular Fundamentals II.

**Restrictions:**

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5222 - Cardiovascular Fundamentals II**

2 Credits

This course is a continuation of Cardiovascular Fundamentals I. It encompasses the pathophysiologic basis of cardiovascular disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal cardiovascular anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to cardiovascular diagnoses.

**Restrictions:**

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5230 - Gastroenterology Fundamentals**

3 Credits

This course encompasses the pathophysiologic basis of gastrointestinal disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal gastrointestinal anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to gastrointestinal diagnoses.

**Restrictions:**

Enrollment is limited to students with a major in Physician Assistant.

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5231 - Gastroenterology Fundamentals I**

1 Credit

The Gastrointestinal/Nutrition (GIN) course provides an integrated approach to understanding the pathophysiologic basis of gastrointestinal, hepatic and nutritional disorders as well as the pharmacological rationale for their therapy. At the same time, students are introduced to the clinical approach to these disorders, including physical examination, clinical, laboratory, and radiographic findings.

**Restrictions:**

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5232 - Gastroenterology Fundamentals II**

2 Credits

The Gastrointestinal/Nutrition (GIN) course provides an integrated approach to understanding the pathophysiologic basis of gastrointestinal, hepatic and nutritional disorders as well as the pharmacological rationale for their therapy. At the same time, students are introduced to the clinical approach to these disorders, including physical examination, clinical, laboratory, and radiographic findings.

**Restrictions:**

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5240 - Nephrology and Genitourinary Fundamentals**

3 Credits

This course encompasses the pathophysiologic basis of genitourinary and renal disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal genitourinary and renal anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to genitourinary and renal diagnoses.

**PAED 5250 - Endocrinology Fundamentals**

3 Credits

This course encompasses the pathophysiologic basis of endocrine disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal endocrine anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to endocrine diagnoses.

**PAED 5260 - Clinical Procedures II**

1 Credit

PAED 5260: Clinical Procedures II is the second of a three-course series that introduces students to common medical procedures that may be included in their duties as a clinical student and a practicing PA. This practical, hands-on course is comprised of lectures, videos, and practical laboratories that loosely follow along with the ten fundamental organ-system based courses ("the modules") and the five population/discipline-based "Essentials" courses. This course interweaves technical skills with concurrently taught clinical material and prepares students to successfully perform procedures during the clinical phase of the program and beyond.

**Restrictions:**

Enrollment is limited to students with a major in Physician Assistant.

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5290 - Clinical Procedures III**

1 Credit

PAED 5290 Clinical Procedures III is the third of a three-course series that introduces students to common medical procedures that may be included in their duties as a clinical student and a practicing PA. This practical, hands-on course is comprised of lectures, videos, and practical laboratories that loosely follow along with the ten fundamental organ-system based courses ("the modules") and the five population/discipline-based "Essentials" courses. This course interweaves technical skills with concurrently taught clinical material and prepares students to successfully perform procedures during the clinical phase of the program and beyond.

**Restrictions:**

Enrollment is limited to students with a major in Physician Assistant.

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5300 - Evidence-Based Medicine**

2 Credits

This course introduces the concepts of evidence-based medicine using a patient oriented approach. It examines tools and techniques for effective and in-depth medical database searches using reputable resources. It also explores clinical questions within a well-built framework and evaluation of articles related to therapy, diagnosis, and prognosis. Basic statistics are reviewed to assist in the assessment of publications and research studies, and exercises are designed to critically review the relevance and validity, including the statistical significance, of results.

**Attributes:** Health & Rehab Sciences

**PAED 5310 - Orthopedics and Rheumatology Fundamentals**

3 Credits

This course encompasses the pathophysiologic basis of musculoskeletal disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal musculoskeletal anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to rheumatologic and orthopedic diagnoses.

**PAED 5320 - Neurology Fundamentals**

3 Credits

This course encompasses the pathophysiologic basis of neurological disorders and their clinical manifestations. It explores system-based medical history and physical exam as well as the complexities of patient assessment, treatment, and management. Within this it also addresses appropriate laboratory tests, imaging, and other diagnostics to be ordered and interpreted. Content includes normal neurologic anatomy and physiology, progresses through pathophysiology and the clinical features of disease, and focuses on patient evaluation, differential diagnosis, and treatment specific to neurology diagnoses.

**PAED 5330 - Essentials of Surgery**

2 Credits

This course focuses on didactic preparation for the required surgery clerkship. It explores the clinical discipline of surgery, the fundamentals of surgical disease, and the care of patients and families affected by this. Pathophysiology, clinical manifestations, and appropriate management of patients with major and minor surgical conditions are emphasized. It examines basic operating room etiquette, surgical techniques, and surgical procedures. The course covers medical/surgical history and physical exam, appropriate laboratory tests, imaging, and other diagnostics, differential diagnosis, pre- and post-operative management, skills for assisting in the operating room, and treatment used in the surgical patient.

**PAED 5340 - Essentials of Emergency Medicine**

2 Credits

This course focuses on didactic preparation for the required emergency medicine clerkship. It explores the clinical discipline of emergency medicine, the fundamentals of acute, urgent, and emergent patient care and those affected by this. Pathophysiology, clinical manifestations, and appropriate patient management are emphasized. It covers patient history and physical exam, emergency patient evaluation, appropriate laboratory tests, imaging, and other diagnostics, differential diagnosis, and treatment used in patients in the acute/urgent/emergent setting.

**PAED 5360 - Essentials of Pediatrics**

2 Credits

This course focuses on didactic preparation for the required pediatric clerkship. It explores the clinical discipline of pediatrics, the fundamentals of pediatric disease, and the care of patients and families affected by this. The physical and psychological fundamentals of normal growth and development are emphasized as well as pathophysiology, clinical manifestations, and appropriate management of the pediatric patient. It covers patient history and physical exam, appropriate laboratory tests, imaging, and other diagnostics, differential diagnosis, pediatric health maintenance, immunization schedules, anticipatory guidance, and treatment used in the pediatric population.

**PAED 5370 - Essentials of Behavioral Medicine**

2 Credits

This course focuses on didactic preparation for the required behavioral health/psychiatry clerkship. It explores the clinical discipline of psychiatry, the fundamentals of psychology, behavioral health, and mental illness, and the care of patients and families affected by this. The effect of society on behavior is explored as well as pathophysiology, clinical manifestations, and appropriate management of the psychiatric/behavioral health patient. It covers patient history and physical exam, mental health evaluation, appropriate laboratory tests, imaging, and other diagnostics, differential diagnosis, and treatment used in the behavioral health/psychiatric population.

**PAED 5380 - Essentials of Obstetrics and Gynecology**

2 Credits

" This course focuses on didactic preparation for the required obstetrics/gynecology/women's health clerkship. It explores the clinical discipline of obstetrics and gynecology, the fundamentals of obstetrical and gynecological disease, and the care of patients and families affected by this. Normal physiology and women's wellness and health maintenance are explored along with pathophysiology, clinical manifestations, and appropriate women's health patient management. It covers patient history and physical exam, appropriate laboratory tests, imaging, and other diagnostics, differential diagnosis, and labor and delivery basics.

**PAED 5390 - Clinical Reasoning Seminar**

1 Credit

PAED 5390 Clinical Reasoning Seminar (CRS) builds upon the medical problem-solving foundation within the ten fundamental organ-system based courses ('the modules') and the five population/discipline based 'essentials' courses. It supports the continued construction of the medical problem-solving framework that prepares students for the transition from didactic studies to clinical rotations.

**Restrictions:**

Enrollment is limited to students with a major in Physician Assistant.

Enrollment limited to students in a Master of Medical Science degree.

**PAED 5400 - Clinical: Internal Medicine**

4 Credits

This clerkship involves active participation in patient care in outpatient and/or inpatient adult internal medicine. It is a hands-on experience that emphasizes patient history, physical exam, assessment, and plan within a framework of disease processes and therapeutics in internal medicine. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results, and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the internal medicine team. It further explores medical documentation, oral patient presentation, and all aspects of patient management and treatment.

**PAED 5420 - Clinical: Family Medicine**

4 Credits

This clerkship involves active participation in primary care across the lifespan in outpatient/ambulatory family practice settings. It is a hands-on experience that emphasizes patient history, physical exam, assessment, and plan within a framework of disease processes, and therapeutics in family medicine. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the primary care team. It further explores medical documentation, oral patient presentation, and all aspects of patient management and treatment.

**PAED 5510 - Clinical: Surgery**

4 Credits

This clerkship involves active participation in general surgery to include pre-operative, operative, and post-operative patient care. It is a hands-on experience that emphasizes surgical skills, patient history, physical exam, assessment, and plan within a framework of disease processes, and therapeutics in surgery. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the surgical team. It further explores medical documentation, oral patient presentation, and all aspects of patient management and treatment.

**PAED 5600 - Clinical: Pediatrics**

3 Credits

This clerkship involves active participation in patient care in pediatrics to include newborn assessment, well-baby/child care, pediatric health maintenance and parent counseling. It is a hands-on experience that emphasizes patient history, physical exam, assessment, and plan within a framework of disease processes and therapeutics in pediatric medicine. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results, and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the pediatric team. It further explores medical documentation, oral patient presentation, and all aspects of patient management and treatment.

**PAED 5700 - Clinical: Behavioral Medicine**

3 Credits

This clerkship involves active participation in patient care in an outpatient and/or inpatient psychiatric/behavioral medicine setting. It is a hands-on experience that emphasizes patient history, physical exam, assessment, and plan within a framework of disease processes and therapeutics in psychiatry/behavioral health. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results, and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the behavioral medicine/psychiatric team. It further explores medical documentation, oral patient presentation, and all aspects of patient management and treatment.

**PAED 5750 - Clinical: Obstetrics, Gynecology and Women's Health**

3 Credits

This clerkship involves active participation in patient care in obstetrics/gynecology/women's health to include prenatal, postpartum, and general gynecologic care. It is a hands-on experience that emphasizes patient history, physical exam, assessment, and plan within a framework of disease processes and therapeutics in women's health. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results, and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the ob/gyn team. It further explores medical documentation, oral patient presentation, and all aspects of patient management and treatment.

**PAED 5800 - Clinical: Emergency Medicine**

4 Credits

This clerkship involves active participation in patient care in emergency medicine with an emphasis on precise and timely diagnosis and emergency management. It is a hands-on experience that emphasizes patient history, physical exam, assessment, and plan within a framework of disease processes, potential trauma, and therapeutics in emergency medicine. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results, and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the emergency medicine team. It further explores medical documentation, oral patient presentation, and all aspects of patient management and treatment.

**PAED 5860 - Clinical: Evidence-Based Medicine Clerkship**

4 Credits

This clerkship involves active participation in patient care in a clinical discipline of the student's choice as well as a critical review of the medical literature based on a clinical question appropriate to the patient population of the practice. It is a hands-on experience that emphasizes patient history, physical exam, assessment, and plan within a framework of disease processes and therapeutics in the chosen specialty. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results, and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the health care team. It further explores medical documentation, oral patient presentation, and all aspects of patient management and treatment.

**PAED 5890 - Clinical: Elective**

4 Credits

This clerkship involves active participation in patient care in a clinical discipline of the student's choice as well as preparation for a grand rounds presentation. It is a hands-on experience that emphasizes patient history, physical exam, assessment, and plan within a framework of disease processes and therapeutics in the chosen specialty. It includes determination of which labs, imaging, and diagnostics to order, interpreting those results, and understanding their impact on the differential diagnosis. The focus is on effective and meaningful patient interaction, and functioning as an essential part of the health care team.

**PAED 6000 - Graduate Seminar**

1 Credit (Repeatable for credit)

This course further explores national certification, state licensure, the job search, employment issues, and other topics related to preparation for the transition from student to health care provider. It encompasses the summative evaluation and it examines potential issues and requirements of practice as a PA in any specialty or setting.