



**NORTH CENTRAL
COLLEGE 1861**

Course Descriptions North Central College MSPAS Program

Scientific Foundations of Medicine

MPAS 501: Foundations of Medical Science I (4 hours)

This inaugural course in a series of three courses designed to develop a practical understanding of human anatomy, embryology histology, as well as normal physiology and the pathophysiologic concepts of diseases per organ system. Focus will be placed on clinically relevant aspects of human anatomy through an in-depth examination of anatomical structures and function using formal lecture and laboratory. Students will utilize the Anatomage Table to virtually dissect whole body cadavers, visualize histological anatomy, and study case-based pathophysiology. Importance will be placed on anatomical structures and normal structural and functional variants, spatial relationships among structures, functional interactions of organ systems and correlate to case-based clinical diseases. The lecture and lab sections correlate with topics covered in Clinical Medicine and Infectious Disease. Students will work together in teams to collaboratively solve problems, demonstrate critical thinking skills, and use their knowledge of normal and pathologic anatomy to answer questions and solve practical and clinical problems. (B2.02 a, b, c, e, B2.03, B2.06 c)

Prerequisites: Admission in the physician assistant program

MPAS 502: Foundations of Medical Science II (2 hours)

This course is the second in a series of three courses designed to develop an advanced understanding of human anatomy and its application to medical imaging, as well as normal physiology and the pathophysiologic concepts of diseases per organ system. Special focus will be on developing a working knowledge of basic medical physiology, pathophysiology and application of normal human gross, surface and functional anatomy to diagnostic radiology and surgical team-based learning. Building on Foundational Medical Science I and Diagnostic Methods I, the student will be exposed to multiple case-based scenarios in the laboratory setting where they can utilize the Anatomage Table to strengthen their interpretation of medical imaging and surgical cases. The lecture and lab sections correlate with topics covered in Clinical Medicine, Diagnostic Methods and Patient Evaluation and Counseling. Students will work together collaboratively in teams to solve problems, demonstrate critical thinking skills, and use their knowledge of normal and pathologic anatomy and physiology to answer questions and solve clinical problems and interpret advanced medical images. (B2.02 a, b, c, B2.03, B2.05, B2.06)

Prerequisites: Admission to the physician assistant program and successful completion of Foundational Medical Science I.

MPAS 503: Foundations of Medical Science III (2 hours)

This course is the third in a series of three courses designed to develop an advanced understanding of human anatomy and its application to medical imaging, as well as normal physiology and the pathophysiologic concepts of diseases per organ system. Special focus will be on developing a working knowledge of basic medical physiology, pathophysiology and application of normal human gross, surface and functional anatomy to diagnostic radiology and surgical team-based learning. Building on Foundational Medical Science II and Diagnostic Methods II, the student will be exposed to multiple case-based scenarios in the laboratory setting where they can utilize the Anatomage Table to strengthen their interpretation of medical imaging and surgical cases. The lecture and lab sections correlate with topics covered in



Clinical Medicine, Diagnostic Methods and Patient Evaluation and Counseling. Students will develop the ability to work together collaboratively in teams to solve problems, demonstrate critical thinking skills, and use their knowledge of normal and pathologic anatomy and physiology to answer questions, solve clinical problems and interpret advanced medical images. (B2.02 a, b, c, B2.03, B2.05, B2.06 b, c)

Prerequisites: Admission to the physician assistant program and successful completion of Foundational Medical Science II.

MPAS 505: Molecular Basis of Disease (3 hours)

The course introduces the concepts and principles critical to understanding the molecular mechanisms of human disease. A solid foundation regarding the scientific basis of disease is necessary for full comprehension of the clinical medicine courses series. The underlying cellular principles that contribute to disease etiology, diagnosis, management, and prevention will be emphasized. Special focus will be given to biochemistry, nutrition, genetics, immunology, virology and microbiology. The pathophysiologic processes behind the cellular basis of disease will be highlighted. (B2.02 b,c, e, B2.05, B2.06b, B2.15).

Prerequisites: Admission in the physician assistant program

Health, Society and Professionalism

MPAS 511: The PA, Patient and Society I (2 hours)

The first offering of this three-course series will provide an overview of population health, with special focus on the complicated tapestry of health care delivery to our pluralistic society. Health systems and policy, health disparities, and identifying best practices for health promotion will be highlighted. Lifestyle medicine as a tool for disease prevention will be highlighted, as well as empathetic medical care delivered with cultural humility that prepares students to practice in a diverse society. A special emphasis on bias in medicine, health literacy and interventions to improve health outcomes will be highlighted. Select readings from the social sciences will allow for student reflection and reinforce concepts discussed in this module (A3.08, B2.04, B2.05, B2.06 a-f, B2.07a-f, B2.08 a,b,d,e, B2.09, B2.10 a-c, B2.11 a-g, B2.12 a-c, B2.13e, B2.14 a-d, B2.15 a-d, B2.16 a-d, B2.20a-b)

Prerequisites: Admission in the physician assistant program

MPAS 512: The PA, Patient and Society II (2 hours)

The second of the three-course series is designed to provide a more granular insight into the social determinants of health at the level of the patient in the context of their family, communities and societies. Special focus will be given to adverse childhood experiences and growing literature regarding best practices in trauma informed care. Social and behavioral topics include death, dying and response to injury, detection and treatment of substance abuse, development and aging, human sexuality, principles of violence identification and prevention, and psychiatric/behavioral conditions. Select readings and artwork from medical humanities and the social sciences will allow for student reflection and reinforce concepts discussed in this module. In addition, this course will introduce the student to the longitudinal curriculum with clinical instructional faculty that is nested in the didactic year, allowing for early exposure to "PAs, Patients and Society" in real time. (B2.04, B2.06 a-f, B2.08 a,b,d,e, B2.10 a-c, B2.11 a-g, B2.12a-c, B2.13e, B2.14 a-d, B2.15 a-d, B2.18, B2.19 a-c)

Prerequisites: Admission to the physician assistant program and successful completion of PA, Patient and Society I.

MPAS 513: The PA, Patient and Society III (2 hours)



The course is the final course in a sequence of three courses that function to onboard the physician assistant student into the PA profession. It will emphasize PA professional history, laws and regulations, PA certification, licensure and scope of practice. Risk management, reimbursement, documentation, coding, billing, quality improvement will be introduced. Select readings from the medical humanities will allow for student reflection and reinforce concepts. In addition, this course will continue the longitudinal curriculum with clinical instructional faculty that is nested in the didactic year, allowing for early exposure to “PAs, Patients and Society” in real time. (B2.04, B2.06a-f, B2.10a-c, B2.12.a-c, B2.14a-d, B2.15a-d, B2.16a-d, B2.17a-g)

Prerequisites: Admission to the physician assistant program and successful completion of PA, Patient and Society II.

MPAS 611: Medical Leadership I (1 hour)

This professional development course offered during the clinical year will build on the relationship-based mentoring program and focus on the development of leadership skills in the physician assistant student as they interface in the clinical setting and experience both successes and challenges. This team-taught class will consist of readings and robust discussions applying bioethics, communication, wellness, and critical leadership concepts to cases experienced during their rotations. Current trends in leadership development in PA education and research, health care quality improvement, fiscal management, and how effective leadership promotes the PA profession will be highlighted. (B2.04, B2.06a-f, B2.10a-c, B2.13a,b,c,e, B2.14c-d, B2.15a-d, B2.16a-d, B2.17c-g, B2.18)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.

MPAS 612: Medical Leadership II (1 hour)

This professional development course offered during the clinical year will build on the development of leadership skills learned in MPAS 611 with a focus of applying the leadership principles in real-life and case-based scenarios. The physician assistant student will apply leadership skills in the clinical setting, and reflect on the application of these skills in their future role as physician assistants. This class will consist of readings, presentations from PA leaders in the field, and the application of actionable medical leadership strategies to case scenarios. Analysis of these educational experiences will be facilitated through online discussions of PA leadership in bioethics, communication, wellness, and critical leadership concepts. Students will reflect on these main themes through cases experienced directly during their rotations. Current trends in leadership development in PA education and research, health care quality improvement, fiscal management, and how effective leadership promotes the PA profession will also be highlighted. (B2.04, B2.06a-f, B2.10a-c, B2.13a,b,c,e, B2.14a-d, B2.15a-d B2.16a-d, B2.17c-g, B2.18)

Prerequisites: Admission to the physician assistant program and successful completion of Medical Leadership I.

Clinical Foundations of Medicine

MPAS 515: Narrative Medicine and Patient-Centered Communication (2 hours)

A) Communication with patients is the core clinical skill for the practice of medicine. It can be defined as specific tasks and observable behaviors that include interviewing to obtain a medical history, explaining a diagnosis and prognosis, giving therapeutic instructions and information needed for informed consent to undergo diagnostic and therapeutic procedures, and providing counseling to motivate participation in therapy or to relieve symptoms. This course will utilize the basic tools of language and story to develop narrative and communication skills and how to encourage and interpret, synthesize and critically think about their patient’s history. Sessions will include literary reflections and artwork that highlights humanism in medicine, patient centered communication and the approach to the medical interview using the SEGUE method. The reawakening of humanistic values will segue into the communication unit where students will be taught the basics of the patient-centered interview both in person and via the evolving practice of telemedicine. Medical communication cases will allow application of advanced communication skills which highlights tone, context, and conflict revolving around death, dying and loss, relaying bad news and medical errors. Specialized communication regarding preventative, rehabilitative,



acute and chronic care using the teach-back method will be highlighted. (B1.01 a,b, B1.03, B1.04 a,b, B2.04, B2.06 a-f, B2.07 a, B2.08 a,b,d, B2.10 a,b,c , B2.11 b-g, B2.12 a-c , B2.14 c, B2.15 a-d, B2.16 a, B2.20 a,b)

B) Introduction to Physical Evaluation the approach and overview of the physical examination. The foundations of the course comprise of external anatomy landmarks and techniques of the examination to include considerations of special needs/disability, gender/gender identify, religious preferences, and professional /ethical conduct during an examination. (B2.05, B2.06 a-f, B2.07 a-f, B2.09)

Prerequisites: Admission to the physician assistant program

MPAS 561: Patient Evaluation and Counseling in Primary Care I (2 hours)

The first in a two-course series that is designed to reinforce medical knowledge and develop the needed skills required to perform and record a complete and focused history and physical exam. The course will accomplish this through instruction of proper physical exam techniques and special tests, proper care and use of adjunct tools and equipment, use of accurate medical terminology to communicate findings, accurate medical records documentation with use of the International Classification of Diseases (ICD) and Current Procedural Terminology (CPT) medical coding classification systems, and organizational skill needed in the examination, documentation, and presentation of case studies with special attention to the examination to include considerations of special needs/disability, gender/gender identify, religious preferences, and professional /ethical conduct during an examination. Instruction in technical skills and procedure training will be performed during structured laboratory exercises (B2.02 a,b,c B2.03, B2.04, B2.05, B2.06 a-f, B2.07 a-f, B2.08 a-e, B2.09, B2.10 a-c, B2.12 a-c, B2.14 a-d, B2.15 a,c, B2.19 a-c)

Prerequisites: Admission to the physician assistant program and successful completion of Narrative Based Medicine and Patient-Centered Communication

MPAS 562: Patient Evaluation and Counseling in Primary Care II (2 hours)

This professional development course offered during the clinical year will build on the development of leadership skills learned in MPAS 611 with a focus of applying the leadership principles in real-life and case-based scenarios. The physician assistant student will apply leadership skills in the clinical setting, and reflect on the application of these skills in their future role as physician assistants. This class will consist of readings, presentations from PA leaders in the field, and the application of actionable medical leadership strategies to case scenarios. Analysis of these educational experiences will be facilitated through online discussions of PA leadership in bioethics, communication, wellness, and critical leadership concepts. Students will reflect on these main themes through cases experienced directly during their rotations. Current trends in leadership development in PA education and research, health care quality improvement, fiscal management, and how effective leadership promotes the PA profession will also be highlighted.

(B2.02 a,b,c B2.03, B2.04, B2.05, B2.06 a-f, B2.07 a-f, B2.08 a-e, B2.09, B2.10 a-c, B2.12 a-c, B2.14 a-d, B2.15 a,c, B2.19 a-c)

Prerequisites: Admission to the physician assistant program and successful completion of Patient Evaluation in Primary Care I

MPAS 525: Evidence Based Medicine I (2 hours)

This course will focus on the basic concepts of research design and biostatistics as they apply to medical research. Students will begin to form a basis for sound, evidence-based, clinical decision making. Core elements of evidence-based medicine will be presented including developing clinical questions, searching and appraising the medical literature, and applying evidence appropriately to the care of an individual patient. Basic descriptive and inferential statistics will be discussed. Case vignettes will be used to assist in the critique of systematic reviews and treatment guidelines. Lectures and active learning activities will encourage the development of professional oral and written communication skills in preparation for Clinical Decision Making and Evidence-Based Medicine II. Students will choose an area of scholarly concentration to begin work on their Master's capstone project based on three research potential tracks: Medical Education, Clinical Case Reports, or Evidence Based Medicine. The Evidence-Based Medicine track will be based solely in



the literature, whereas the clinical and medical education will be both scholarly and experiential. (B2.04, B2.06 a-f, B2.13 a.-e., B2.19a.-c)

Prerequisites: Admission in the physician assistant program

MPAS 626: Evidence Based Medicine II and Applied Research (1 hour)

Prior to the starting Supervised Clinical Practice Experiences (SCPEs), students will build on foundational principles covered in Evidence Based Medicine I and begin to research their well formulated research question. Important milestones will be mapped to assure interaction between the student, their faculty advisor, course director and various outside readers of the capstone master's project. The course is designed for students to take on more professional responsibility in adapting to and applying the core elements of evidence-based medicine to the student's area of scholarly concentration. Case-based studies will be continued to be reviewed in large group settings to solidify concepts taught in evidence-based medicine I and bioethics. (B2.04, B2.05, B2.13 a-e, B2.16 a.-d., B2.19 a.-c)

MPAS 627: Evidence Based Medicine III and Applied Research (1 hour)

The primary focus of Evidence-Based Medicine III is to finalize the capstone research project and continue to apply evidence-based medicine principals to clinical experiences. Important milestones will be mapped to assure interaction between the student, their faculty advisor, course director and various outside readers of the capstone master's project. The course is designed for students to take on more professional responsibility in adapting to and applying the core elements of evidence-based medicine to the student's area of scholarly concentration. Capstone thesis presentations will be open to the NCC community and delivered once the thesis has been approved by the primary and secondary reader. (B2.04, B2.05, B2.13 a.-e., B2.16 a.-d., B2.19 a.-c.)

Prerequisites: Admission to the physician assistant program and successful completion of Evidence Based Medicine and Applied Research II

MPAS 521: Clinical Therapeutics I (3 hours)

Clinical therapeutics I first in a series of four courses designed to develop foundational knowledge of the principles and practices of pharmacology and pharmacotherapeutics. This course is delivered synchronously with Clinical Medicine and Infectious Disease I and will cover major principles of pharmacodynamics, pharmacokinetics and pharmacogenomics. A framework for understanding the major classifications of therapeutic agents will be introduced including: their molecular mechanisms of action, dynamic and kinetic properties, therapeutic uses, drug-drug, drug-disease and drug- food interactions, side effects, and toxicities. The principles of patient safety, specifically related to altered pharmacodynamic/kinetic/genetic properties related to age, ethnicity as well as cost/benefit of pharmacological interventions will be reviewed with each drug class and with commonly prescribed medications in primary care. Areas of disease specific pharmacologic clinical applications will follow the systems-based approach. Particular emphasis will be placed on interpretation of the medical literature using principles of evidence-based medicine in pharmacologic management of disease.(B2.05, B2.06b, B2.02 (d), B2.07 c,e,f, B2.08a,b, B2.16 a,b,d, B2.17 c-f2)

Prerequisites: Admission to the physician assistant program

MPAS 522: Clinical Therapeutics II (3 hours)

Clinical therapeutics II is the second in a series of four courses designed to develop foundational knowledge of the principles and practices of pharmacology and pharmacotherapeutics. This course is delivered synchronously with Clinical Medicine and Infectious Disease II-III and will cover major principles of pharmacodynamics, pharmacokinetics, and pharmacogenomics. A framework for understanding the major classifications of therapeutic agents will be introduced including: their mechanisms of action, dynamic and kinetic properties, therapeutic uses, drug-drug, drug-disease and drug-food interactions, side effects, and toxicities. The principles of patient safety, specifically related to altered pharmacodynamic/kinetic/genetic properties related to age, ethnicity as well as cost/benefit of pharmacological interventions will be reviewed with each drug class and with commonly prescribed medications in primary care. Areas of



disease specific pharmacologic clinical applications will follow the systems-based approach. Particular emphasis will be placed on interpretation of the medical literature using principles of evidence-based medicine in pharmacologic management of disease. (B2.06a-c,f, B2.05, B2.02 (d), B2.07 c,e,f, B2.08a-b, B2.12a, B2.16a,b,d)

Prerequisites: Admission to the physician assistant program and successful completion of Clinical Therapeutics I

MPAS 523: Clinical Therapeutics III (3 hours)

Clinical therapeutics III is the third in a series of four courses designed to develop foundational knowledge of the principles and practices of pharmacology and pharmacotherapeutics. This course is delivered synchronously with Clinical Medicine and Infectious Disease IV-V and will cover major principles of pharmacodynamics, pharmacokinetics, and pharmacogenomics. A framework for understanding the major classifications of therapeutic agents will be introduced including: their molecular mechanisms of action, dynamic and kinetic properties, therapeutic uses, drug-drug, drug-disease and drug-food interactions, side effects, and toxicities. The principles of patient safety, specifically related to altered pharmacodynamic/kinetic/genetic properties related to age, ethnicity as well as cost/benefit of pharmacological interventions will be reviewed with each drug class and with commonly prescribed medications in primary care. Areas of disease specific pharmacologic clinical applications will follow the systems-based approach. Particular emphasis will be placed on interpretation of the medical literature using principles of evidence-based medicine in pharmacologic management of disease. (B2.05, B2.02 (d), B2.06 a-c, f, B2.07 c,e,f B2.08 a,b, B2.12 a-c, B2.16 a-d)

Prerequisites: Admission to the physician assistant program and successful completion of Clinical Therapeutics II

MPAS 624: Clinical Therapeutics IV (1 hour)

Clinical therapeutics III is the third in a series of four courses designed to develop foundational knowledge of the principles and practices of pharmacology and pharmacotherapeutics. This course is delivered synchronously with Clinical Medicine and Infectious Disease IV-V and will cover major principles of pharmacodynamics, pharmacokinetics, and pharmacogenomics. A framework for understanding the major classifications of therapeutic agents will be introduced including: their molecular mechanisms of action, dynamic and kinetic properties, therapeutic uses, drug-drug, drug-disease and drug-food interactions, side effects, and toxicities. The principles of patient safety, specifically related to altered pharmacodynamic/kinetic/genetic properties related to age, ethnicity as well as cost/benefit of pharmacological interventions will be reviewed with each drug class and with commonly prescribed medications in primary care. Areas of disease specific pharmacologic clinical applications will follow the systems-based approach. Particular emphasis will be placed on interpretation of the medical literature using principles of evidence-based medicine in pharmacologic management of disease. (B2.05, B2.02 (d), B2.06 a-c, f, B2.07 c,e,f B2.08 a,b, B2.12 a-c, B2.16 a-d)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year

MPAS 531: Clinical Medicine & Infectious Disease I (4 hours)

Clinical Medicine and Infectious Disease I is the first course in a sequence of five courses encompassing the principles and practices of clinical medicine. These courses are structured to provide a systems-based intensive study of human disease and disorders across the lifespan focusing on epidemiology, etiology, clinical manifestations, diagnosis, clinical interventions, medical and surgical treatment, prevention, and prognosis. Students will integrate and apply knowledge obtained in the Foundational Medical Sciences, Clinical Therapeutics, Patient Evaluation and Counseling and Diagnostic Methods to these particular areas of study. (B2.02a,b,c,e; B2.03; B2.04, B2.05; B2.06a-f, B2.07a-f B2.08a-b; B2.09, B2.10a-c; B2.11c-d; B2.12a-c; B2.13a-e; B2.14; B2.15a-d)

Prerequisites: Admission to the physician assistant program



MPAS 532: Clinical Medicine & Infectious Disease II (4 hours)

Clinical Medicine and Infectious Disease II is the second course in a sequence of five courses encompassing the principles and practices of clinical medicine. These courses are structured to provide a systems-based intensive study of human disease and disorders across the lifespan focusing on epidemiology, etiology, clinical manifestations, diagnosis, clinical interventions, medical and surgical treatment, prevention, and prognosis. Students will integrate and apply knowledge obtained in the Foundational Medical Sciences, Clinical Therapeutics, Patient Evaluation and Counseling and Diagnostic Methods to these areas of study. (B2.02a-e, B2.03, B2.04, B2.05, B2.06a,b,c,f, B2.07a-f, B2.08, B2.09, B2.10, B2.11, B2.12a-b, B2.13, B2.15a-d)

Prerequisites: Admission to the physician assistant program and successful completion of Clinical Medicine and Infectious Disease I

MPAS 533: Clinical Medicine & Infectious Disease III (4 hours)

Clinical Medicine and Infectious Disease III is the third course in a sequence of five courses encompassing the principles and practices of clinical medicine. These courses are structured to provide a systems-based intensive study of human disease and disorders across the lifespan focusing on epidemiology, etiology, clinical manifestations, diagnosis, clinical interventions, medical and surgical treatment, prevention, and prognosis. Students will integrate and apply knowledge obtained in the Foundational Medical Sciences, Clinical Therapeutics, Patient Evaluation and Counseling and Diagnostic Methods to these particular areas of study. (B2.02, B2.03, B2.04, B2.05, B2.06a-f, B2.07a-f, B2.08a-b, B2.09, B2.10a-c, B2.11c-d, B2.12a-c, B2.13a-e, B2.14a-d, B2.15a-d)

Prerequisites: Admission to the physician assistant program and successful completion of Clinical Medicine and Infectious Disease II

MPAS 534: Clinical Medicine & Infectious Disease IV (4 hours)

Clinical Medicine and Infectious Disease IV is the fourth course in a sequence of five courses encompassing the principles and practices of clinical medicine. These courses are structured to provide a systems-based intensive study of human disease and disorders across the lifespan focusing on epidemiology, etiology, clinical manifestations, diagnosis, clinical interventions, medical and surgical treatment, prevention, and prognosis. Students will integrate and apply knowledge obtained in the Foundational Medical Sciences, Clinical Therapeutics, Patient Evaluation and Counseling and Diagnostic Methods to these particular areas of study. (B2.02a-e, B2.03, B2.04, B2.05, B2.06a,b,c,f, B2.07a-f, B2.08a-c, B2.09, B2.10a-c, B2.11 c-e, B2.12a-c, B2.13b, B2.14a-b, B2.15a-d)

Prerequisites: Admission to the physician assistant program and successful completion of Clinical Medicine and Infectious Disease III

MPAS 535: Clinical Medicine & Infectious Disease V (4 hours)

Clinical Medicine and Infectious Disease V is the final course in a sequence of five courses encompassing the principles and practices of clinical medicine. This course is structured to prepare the learner to enter the clinical phase of the program, focusing on specialized groups using a systems-based intensive study of human disease and disorders across the lifespan focusing on epidemiology, etiology, clinical manifestations, diagnosis, clinical interventions, medical and surgical treatment, prevention, and prognosis. Topics specific to Neurology and Behavioral Health will be the focus, as well as an introduction to specialty topics in geriatrics, pediatrics, emergency medicine and surgery. Students will integrate and apply knowledge obtained in the Foundational Medical Sciences, Clinical Therapeutics, Patient Evaluation and Counseling and Diagnostic Methods to these particular areas of study. (B2.02, B2.03, B2.04, B2.05, B2.06a-f, B2.07a-f, B2.08a,b,d, B2.09, B2.10a-c, B2.11c-g, B2.12a-c, B2.13e, B2.14a-d, B2.15a-d)

Prerequisites: Admission to the physician assistant program and successful completion of Clinical Medicine and Infectious Disease IV



MPAS 551: Clinical Decision Making I (3 hours)

This course is the first of two team-taught classes that will timely review material presented in Clinical Medicine and Infectious Disease II & III in a case-base setting providing students a foundation to approach to diagnostic reasoning, formulating problem lists and differential diagnoses, self-directed learning and communication in written and oral forms. Students will work in groups of 6-8 learners with a facilitator where they will encounter a clinical case that builds on material presented in Clinical medicine II-III (Cardiovascular, Pulmonary, Renal, Endocrine and Reproductive Health) using both problem-based learning and simulation pedagogy. In addition to working collaborative within the PA space, students will participate in interprofessional team simulations. (B2.02, B2.03, B2.04, B2.05, B2.06a-f, B2.07a-f, B2.08a-b, B2.09, B2.10a-b B2.11c-d, B2.12a-c, B2.13e, B2.14a-d, B2.15a-d)

Prerequisites: Admission to the physician assistant program

MPAS 552: Clinical Decision Making II (3 hours)

This course is the second of two team-taught classes that will timely review material presented in Clinical Medicine and Infectious Disease in a case-base setting providing students a foundation to approach to diagnostic reasoning, formulating problem lists and differential diagnoses, self-directed learning and communication in written and oral forms. Students will work in groups of 6-8 learners with a facilitator where they will encounter a clinical case that correlate to material presented in Clinical Medicine IV and V (Dermatology, Musculoskeletal, Gastroenterology, Neurology and Behavioral Health) in small team-based groups using both problem-based learning and simulation pedagogy. In addition to working collaborative within the PA space, students will participate in interprofessional team simulations. (B2.02a-e, B2.03, B2.04, B2.05, B2.06a-f, B2.07a-f, B2.08a-e, B2.09, B2.10a-c, B2.11c-d, B2.12a-c, B2.13e, B2.14a-d, B2.15a-d)

Prerequisites: Admission to the physician assistant program and successful completion of Clinical Decision Making I

MPAS 541: Diagnostic Methods I (2 hours)

Diagnostic Methods I represent the first in a three-course series designed to develop a functional understanding of the clinical decision making involved in the selection and interpretation of genetic testing and diagnostic imaging. It is designed to complement the content covered in Clinical Medicine and Infectious Disease, Foundations of Medical Science I, and the Molecular Basis of Disease. Course content highlights selected genetic testing and radiologic imaging procedures, with emphasis on effective utilization in the diagnosis and management of disease states. The genetic testing module will explore standard testing, personalized medicine, and ethical issues raised. In the radiology module, the students will be introduced to the basics of diagnostic imaging, learn to select, interpret and communicate normal findings on musculoskeletal films, Chest X-ray, CT and MRI. Special focus will be placed on patient safety and avoidance of medical error in medical imaging. Several clinical laboratories will be employed to teach the technical skills required vascular access, foreign body removal and airway stabilization. (B2.02a-c, B2.03, B2.04, B2.05, B2.06a-f, B2.07d, B2.08a-b, B2.09, B2.10a-c, B2.12a-c, B2.13e, B2.14a-d, B2.15a-d)

Prerequisites: Admission in the physician assistant program

MPAS 542: Diagnostic Methods II (2 hours)

Diagnostic Methods I represent the first in a three-course series designed to develop a functional understanding of the clinical decision making involved in the selection and interpretation of genetic testing and diagnostic imaging. It is designed to complement the content covered in Clinical Medicine and Infectious Disease, Foundations of Medical Science I, and the Molecular Basis of Disease. Course content highlights selected genetic testing and radiologic imaging procedures, with emphasis on effective utilization in the diagnosis and management of disease states. The genetic testing module will explore standard testing, personalized medicine, and ethical issues raised. In the radiology module,



the students will be introduced to the basics of diagnostic imaging, learn to select, interpret and communicate normal findings on musculoskeletal films, Chest X-ray, CT and MRI. Special focus will be placed on patient safety and avoidance of medical error in medical imaging. Several clinical laboratories will be employed to teach the technical skills required vascular access, foreign body removal and airway stabilization. (B2.02a-e, B2.03, B2.04, B2.05, B2.06 a-f, B2.07d, B2.08a-b, B2.09, B2.10a-c, B2.12a-c, B2.13e, B2.14a-d, B2.15a-d, B2.16 a-c)

Prerequisites: Admission to the physician assistant program and successful completion of Diagnostic Methods I

MPAS 543: Diagnostic Methods III (2 hours)

Diagnostic Methods III is the final course in a three-course series designed to develop a functional understanding of the clinical decision making involved in the selection and interpretation of necessary diagnostic laboratory testing. It is designed to complement the content covered in Clinical Medicine and Infectious Disease IV & V, Foundations of Medical Science III, Clinical Therapeutics III and Patient Evaluation and Counseling III. Students will learn to select, interpret, diagnose, communicate normal and abnormal results, and recommend appropriate management options. Particular focus will be placed on clinical procedures and technical skills required to obtain advanced diagnostic studies. Several clinical laboratories provide instruction in the technical skills and procedures involved in the acquisition of these studies, such as further focus on radiologic imaging, upper and lower extremity fracture stabilization joint aspiration, lumbar puncture, nasogastric tube insertion, and introduction to dermatologic and surgical techniques. (B2.02a-c, B2.03, B2.04, B2.05, B2.06a-f, B2.07d, B2.08a-d, B2.09, B2.10a-c, B2.12a-c, B2.13e, B2.14a-d, B2.15a-d, B2.16a-c)

Prerequisites: Admission to the physician assistant program and successful completion of Diagnostic Methods II

MPAS 600: Bridge Course (3 hours)

This course functions as a transition from the didactic year to Supervised Clinical Practice Experiences (SCPEs). Topics covered include preceptor expectations, self-care, electronic medical records training, professionalism, and BLS/ACLS/PALS certification. A focus on training necessary for the clinical rotations, including knowledge related to blood borne pathogens, patient privacy, and discipline-specific didactic and skills training. Student safety at clinical sites as well as the Occupational Safety and Health Administration (OSHA) and the Health Insurance Portability and Accountability Act (HIPAA) training, will be highlighted. A review of systems-based practices that improve healthcare safety, and an in-depth discussion of program requirements for successful progression through clinical education experiences. The basics of Emergency Medicine Spanish will be covered. The goal of instruction in emergency Medicals Spanish to assist in communication and break down barriers between medical providers and patients. (B2.03, B2.04, B2.05, B2.06 a-f, B2.08 a-e, B2.09, B2.10a-c, B2.12 b, B2.15 a, B2.16a, B2.19a-c, B2.20 a,b)

Prerequisite: Successful completion or remediation of the didactic year course work coursework

Supervised Clinical Practice Experiences

MPAS 630: Emergency Medicine (6 Hours)

This six-week clinical course provides the physician assistant student with experience in triage, evaluation, and management of patients across the lifespan, from infants to elderly in the emergency department setting with special focus on adults and elderly patients. The Emergency Medicine rotation will provide physician assistant students with supervised clinical practice experiences in acute, chronic and emergent evaluation of patients within the emergency department and the development of a clinical skill set specific to emergency medicine. Students will improve their medical knowledge and clinical reasoning skills required for emergent, acute and chronic triage and the technical skills required for the stabilization of patients across the lifespan presenting to the emergency department with commonly encountered medical problems and injuries. Students will increase their understanding on how to collaborate with



members of the health care team, history and physical exams, the ordering and interpreting appropriate diagnostic studies, diagnosis, management and obtaining appropriate consultation of specialist care for patients seeking emergency care. (B3.03 a,b , B3.04a, B3.05, B3.06 a-c, B3.07 b)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.

MPAS 635: Internal Medicine (6 hours)

This six-week clinical course provides the physician assistant student with an opportunity to gain supervised experience in providing care to inpatient and outpatient internal medicine patients. The hospital-based internal medicine rotation will allow the student to further develop their medical knowledge, clinical reasoning, technical and problem-solving skills as they encounter and assess common medical problems in an adult inpatient environment. Students will learn how to communicate and collaborate with members of the inpatient internal medicine health care team, including ordering and interpreting appropriate diagnostic studies, diagnosis, management of common problems, and initiation of consultation in specialist care. Students will participate in the admission, appropriate level of daily care, and discharge planning of the hospitalized adult or elderly patient. (B3.03 a,b , B3.04 b,c B3.05, B3.06 a-c, B3.07 c)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.

MPAS 640: Family Medicine (6 hours)

This six-week clinical course provides the physician assistant student with supervised experiences in evaluating and treating common problems encountered in Family Medicine. The goal of the Family Medicine supervised clinical practice experience is to provide physician assistant students with experience in the evaluation of the ambulatory infant, child, adolescent, adult, or elderly patient. Students will provide care to patients seeking preventive, acute and chronic care. Students will be expected to assess and manage patients in a team-based setting, where commonly encountered medical conditions occur. The physician assistant student will learn the clinical reasoning, technical skills and best practices of ordering diagnostic studies and interpreting them specific to the conditions commonly treated in family medicine. In addition, the student will recognize when to refer patients to community health resources and participate in the delivery of family-centered care as part of an interprofessional team. (B3.03 a,b, B3.04 c B3.05, B3.06 a-c, B3.07 a)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.

MPAS 645: Women's Health (6 hours)

This six-week clinical course in Women's Health will provide the physician assistant student with supervised experiences in evaluating and managing common conditions related to the health of women, which includes prenatal, postnatal and gynecologic care in acute, chronic and preventive settings. The student will have the opportunity to participate in prenatal and postpartum assessments, as well as participate in routine gynecologic care as part of an interprofessional team. The goals of the Women's Health rotation are to provide the physician assistant student with clinical experiences that build knowledge and skills specific to the care of women. The student will learn the clinical reasoning, technical skills, and best practices of ordering and interpreting diagnostic studies specific to the evaluation and management of the adult woman seeking care for preventive health services, common breast and gynecologic problems, as well as routine obstetrical care. (B3.03 a-c, B3.04 c B3.05, B3.06 a-c, B3.07 f)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.

MPAS 650: Pediatrics (6 hours)

This six-week clinical course provides the physician assistant student with supervised experiences in the outpatient management of pediatric patients. The goals of the Pediatric rotation are to provide the physician assistant student with the opportunity to build and increase their pediatric discipline-specific skills. Students will have the opportunity to perform acute, chronic and preventative care such as well child exams and preventive health services. Students will



assess and manage commonly encountered medical problems in the infant, child and adolescent population, identify and provide referral to community resources and or specialty care providers as appropriate and participate as a member of the pediatric health care team. (B3.03 a-b, B3.04 c B3.05, B3.06 a-c, B3.07 e)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.

MPAS 655: General Surgery (6 hours)

This six-week clinical course provides the physician assistant student with an opportunity for supervised experience in General Surgery. The goals of the General Surgery rotation are to provide physician assistant student with the opportunity to care for conditions requiring surgical management, including pre-operative, intra-operative, and post-operative care. The physician assistant student will gain experience in the surgical assessment of emergent, acute, and chronic patient encounters in adult and elderly patients. The student will learn the clinical reasoning, technical skills and best practices of ordering and interpreting diagnostic studies specific to the conditions commonly treated by general surgeons, including the complications of surgical management and the development of basic surgical assisting skills. The student will evaluate and care for adult and elderly patients with commonly encountered health conditions requiring surgical management in the outpatient, inpatient, and operating room settings and participate as a member of the surgical care team. (B3.03 a,b,d, B3.04 d B3.05, B3.06 a-c, B3.07 d)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.

MPAS 660: Behavioral Health (6 hours)

This six-week clinical course provides the physician assistant student with supervised experience in caring for ambulatory and/or hospitalized patients with psychiatric disorders. The goals of the Behavioral Health rotation are to provide the physician assistant student with experiences that will build and increase their behavioral health-specific knowledge and skills. Students will have the opportunity to provide behavioral health care for acute and chronic encounters in adolescent, adult, and elderly patients of all genders. The student will be given opportunities to participate in the clinical management plan for patients following psychiatric evaluation, incorporate behavioral therapies promoted by mental health professionals and assist in the monitoring of psychotropic medications. The importance of a team-based approach to the management of behavioral health care delivery will be highlighted throughout the clinical experience. (B3.03 a,b,e, B3.04 b,c B3.05, B3.06 a-c, B3.07 g)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.

MPAS 665: Elective

The four-week clinical elective course will provide the physician assistant student the ability to gain clinical experience in an area of interest. The student may choose from a range of specialty rotations in urgent care, family medicine, pediatrics, and internal medicine or various surgical subspecialties. The goal of the elective will be for the student to obtain more intentional study in primary care or become familiar with conditions treatable by medical and surgical specialists in the field, thereby allowing for appropriate referral. Students may also desire to use this elective to investigate what gainful employment looks like in a supportive role as they consider future job opportunities. The program reserves the right to use this elective slot for an additional supervised experience should the student require core-rotation remediation. (B2.04, B2.07b, B2.12 b, B2.13 e, B2.15 a, B2.19 c , B3.03a-e, B3.04 a-d, B3.05, B3.06, B3.06a-c,)

Prerequisites: Admission to the physician assistant program and successful completion of didactic year.



MPAS 695: Senior Capstone Seminar (3 Hours)

The Senior Capstone Seminar is designed as a culminating educational and professional development experience, consisting of reviewing, and assessing competencies for the didactic and the clinical curriculum. Advanced professional development will be reviewed such as mandatory reporting laws and legal issues, medical liability, interacting with the pharmaceutical industry as a practicing clinician. Professional coaching will occur which includes interviewing tips, resume writing, licensure, and DEA. Summative II and PACKRAT scores will inform PANCE review and test taking strategies will be discussed. A certified physician assistant panel will present career strategies, contract negotiation, fellowship opportunities and pearls to survive on the job. (B2.02d, B2.06a-f, B2.10a-c, B2.13a-e, B2.16a-d, B2.17a-g, B2.19a-c)

Prerequisite: Successful completion or remediation of the clinical year course work coursework.



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