

Midwestern University  
College of Health Sciences  
Glendale, AZ

**PHYSICIAN ASSISTANT PROGRAM**

Mission Statement (B1.01a):

The Midwestern University Physician Assistant Program-Glendale is committed to educate and mentor students in a setting that cultivates excellence and prepares compassionate, competent physician assistants to serve in a changing healthcare environment. We value a culture of inclusion where students, staff and faculty are honored, respected, and engaged.

**2023 – 2024 CLINICAL ROTATIONS SYLLABUS**

48 Credits

PASSG 691: Emergency Medicine  
PASSG 692: Family Medicine  
PASSG 693: Internal Medicine  
PASSG 694: Pediatrics

PASSG 695: Psychiatry Medicine  
PASSG 696: Surgery  
PASSG 697: Women's Health  
PASSG 698: Elective

**COURSE PURPOSE**

The clinical year courses/rotations will provide overall instruction and supervised clinical practice experiences. The course(s) will cover common conditions and abnormalities encountered across the lifespan, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

**COURSE GOALS (B1.01a-d)**

The primary goal of the MWU PA Program is to meet student educational needs. Clinical year rotations provide meaningful direct patient care experiences with patients from diverse populations by working in a variety of clinical practice environments. They allow students an opportunity to apply the knowledge and skills learned throughout the didactic phase to enhance their clinical understanding and problem-solving skills. Clinical rotations will reinforce classroom teaching and allow for professional and interprofessional growth. Clinical rotations should prepare students for NCCPA certification and clinical practice as a physician assistant.

**COURSE COORDINATORS (A2.01, A2.05, A2.13)**

The course coordinators include the Director of Clinical Education, Clinical Coordinators, and clinical preceptors. Students should direct all questions regarding course administration to the program's clinical faculty.

Kimberly Carter, DMSc, PA-C, RD  
Director of Clinical Education/Associate Professor  
Phone: 623-572-3840  
Email: [kcarte@midwestern.edu](mailto:kcarte@midwestern.edu)

Deborah Black, MS, PA-C  
Clinical Coordinator/Assistant Professor  
Phone: 623-572-3764  
Email: [dblack@midwestern.edu](mailto:dblack@midwestern.edu)

Gretchen Post, MS, PA-C  
Clinical Coordinator/Assistant Professor  
Phone: 623-572-3763  
Email: [gpost@midwestern.edu](mailto:gpost@midwestern.edu)

Midwestern University – Glendale, AZ  
Physician Assistant Program  
Phone: 623-572-3311  
Fax: 623-572-3227  
Email: [azpaclinical@midwestern.edu](mailto:azpaclinical@midwestern.edu)

Office hours vary by faculty member and quarter. Appointments with the course coordinators can be made by phone or email.

## **COURSE LOCATION**

Students will be asked to complete rotation requirements in the community setting, inpatient and outpatient setting(s), rural setting, etc.

## **COURSE PREREQUISITES**

- 1) Successful completion of all didactic-year PA coursework.
- 2) Current BLS/ACLS status.
- 3) Current immunization status.
- 4) Successful completion of all required credentialing paperwork.
- 5) Successful completion of all required Everfi/Foundry courses.
- 6) Current N95 Respirator mask fit certificate, per MWU PA Program policy.

## **COURSE DESCRIPTIONS & GOALS (B1.01a-d, B2.08a-d, B2.12a-c, B2.14b, B3.03a-e, B3.04a-d, B3.07a-g)**

**INTERNAL MEDICINE:** The Internal Medicine Course emphasizes the comprehensive care of the adult patient including chronic and acute disease management, preventive care and health maintenance, and patient education. Other principles include continuity of care, delivery of cost-effective quality care, and identifying supplemental sources of care within the community.

### **PASSG 693 Internal Medicine Goals:**

- 1) Participate in the care of emergent, urgent, acute, and chronic conditions in adult and elderly patients encountered in the internal medicine setting.
- 2) Participate in the care of patients presenting for hospital follow-ups including but not limited to review of hospital records, reevaluation and formation of a comprehensive assessment and plan, management of abnormal test results, and coordination of care.
- 3) Elicit a comprehensive history to include a history of present illness, past medical history, past surgical history, family history, and appropriate review of systems necessary to evaluate the chief complaint.
- 4) Describe the epidemiology, etiology, pathophysiology, clinical presentation, differential diagnosis, diagnostic evaluation, and management of emergent, urgent, and acute and chronic conditions common to the internal medicine setting as indicated on the NCCPA PANCE Content Blueprint and the PAEA End-of-Rotation Exam Internal Medicine Topic List.
- 5) Select, collect, and/or interpret common studies including but not limited to venipuncture, UA and drug screens, throat swabs, rapid strep testing, mono spot testing, vaginal secretions (KOH preps, wet mount, cultures), wound cultures, stool testing for occult blood, synovial joint aspirations, cardiac enzymes, and sputum cultures.
- 6) Order and interpret common laboratory and diagnostic studies including but not limited to routine radiographic studies, advanced imaging (CT/MRI), pulmonary function testing, EKG, and ultrasonography.
- 7) Describe the indications, contraindications, side effects, and complications of common procedures (i.e., I&D, SQ/IM injection, pap smear, immunization administration, joint injection, cryotherapy, ear irrigation, cerumen removal, finger/toenail removal, spirometry, shave and punch biopsy, infiltration with local anesthetic, digital block, and PPD skin test).
- 8) Know the mechanism of action, indication, contraindications, side effects, and drug interactions of common pharmacologic agents.
- 9) Be familiar with first-line antibiotics for common primary care infections including but not limited to cellulitis, sinusitis, bacterial conjunctivitis, diverticulitis, etc.
- 10) Be familiar with the physiological changes associated with aging as well as comorbidities and polypharmacy (i.e., Beers Criteria).

- 11) Be able to provide basic nutrition counseling to the patient with hyperlipidemia, hypertension, Type 2 Diabetes, etc.
- 12) Be able to recognize the need for referral to medical subspecialty or surgery consultation. Be involved in transitional care management to include hospice and end-of-life care.
- 13) Apply the principles of health promotion and disease prevention to describe and select appropriate preventative screening and health maintenance measures.
- 14) Communicate clearly, concisely, and logically to colleagues, patients, and family members regarding the evaluation, management, and education of conditions managed in the internal medicine setting.

**EMERGENCY MEDICINE:** The Emergency Medicine Course emphasizes the care of the patient with acute disease management, stabilization, and proper follow-up. The purpose of this rotation is to provide the student with a knowledge base about decision-making and initiation of emergent care. The challenges faced by Physician Assistants in emergency medicine are to know a little about everything, know what you know, and know when to ask for help. The rotation will expose the student to many different situations, some not so challenging, some that are extremely challenging. The goal of the rotation is to expose the student to common emergency encounters to prepare them for everyday practice.

### **PASSG 691 Emergency Medicine Goals:**

- 1) Identify and describe the etiology, risk factors, pathophysiology, clinical presentation, diagnostic evaluation, and management of common conditions encountered in emergency medicine including but not limited to neurologic, ENT, airway, orthopedic, urologic, endocrine emergencies as well as burns, skin, and soft tissue infections, fever of unknown origin, trauma, fractures, sepsis, shock, hemorrhage, drug overdose, intoxication injuries, and environmental injuries.
- 2) Recognize life-threatening emergencies and initiate an appropriate course of action to stabilize the patient.
- 3) Elicit and perform an appropriate thorough history and physical exam for a patient presenting with an urgent and/or emergent condition.
- 4) Formulate an appropriate differential diagnosis for common urgent and emergent complaints including but not limited to chest pain, SOB/dyspnea, abdominal pain, altered mental status, etc.
- 5) Be familiar with the following acronyms/terms and have a basic understanding of their use in Emergency Medicine (i.e., GCS, Curb 65, PERC for Pulmonary Embolism, TIMI for chest pain, HEART score for chest pain, SIRS criteria for sepsis, PECARN for a head injury in peds < 16 yo and ACEP 2008 head CT policy for age > 16 yo, NIH Stroke scale, NEXUS for spinal cord trauma).
- 6) Gain a basic understanding and interpretation of common laboratory and diagnostic studies used in emergency medicine including but not limited to CBC, CMP, lipase, HCG, cardiac enzymes, lactate, BNP, UA, urine drug screen, x-rays, EKG, POCUS, CT Head/Brain and CXR A/P.
- 7) Be familiar with common medications used including but not limited to Motrin, Tylenol, Morphine, Narcan, Epinephrine, and ACLS protocols/drugs.
- 8) Demonstrate the ability to assist or correctly perform, under direct supervision, common medical procedures including but not limited to I&D, wound irrigation and debridement, suture/skin staple placement and removal, application of splints, joint aspiration, infiltration with a local anesthetic, digital block, laceration repair, toenail or fingernail removal, IM and SQ injection, endotracheal intubation, urinary catheter insertion, lumbar puncture, fracture, and dislocation reduction.
- 9) Participate in hospital admission, ER discharge with close follow-up, or transfer of care orders.
- 10) Communicate clearly, concisely, and logically to colleagues, patients, and family members regarding the evaluation, management, and education of urgent and emergent condition

**SURGERY:** The Surgery Course provides students with clinical experience in pre-operative, intra-operative, and post-operative care. Principles of pre-operative, operative, and post-operative patient care are emphasized (i.e., initial history and physical exam for a surgical patient, preoperative risk assessment, recognize surgical emergencies, sterile technique/field, retraction, hemostasis, wound management, patient education, etc.). Regardless of the rotation setting students are encouraged to focus on general surgical principles in preparation for the end of rotation examination and the PANCE. The course covers common conditions and abnormalities encountered in the adult populations, with an emphasis on the conditions listed in the National Commission on Certification of Physician Assistants (NCCPA) Physician Assistant National Certification Examination (PANCE) content blueprint.

### **PASSG 696 Surgery Goals:**

- 1) Identify clinical presentations that warrant a surgical consult and know the appropriate timeframe for a referral.
- 2) Understand the roles of healthcare teams involved in the care of a surgical patient.
- 3) Understand and participate in pre-operative care of the surgical patient including but not limited to H/P surgical consultation, review of surgical technique, and education on the indications, contraindications, and risk/benefits of surgery.
- 4) Understand and participate in intra-operative care of the surgical patient including but not limited to sterile technique, positioning/draping, surgical instrument use, anatomic landmarks, retraction and exposure, wound closure, dressing application, and patient and provider safety.
- 5) Understand and participate in the post-operative care of the surgical patient including but not limited to antibiotic use, DVT prophylaxis, pain management, wound care, clinical assessments, laboratory monitoring, discharge planning, etc. Be familiar with the components of a post-op note and post-op orders.
- 6) Participate in surgical rounds and inpatient consultations as able.
- 7) Understand the utility and participate in the interpretation of diagnostic studies in the evaluation of the surgical patient including but not limited to x-rays, ultrasounds, cross-sectional imaging, barium studies, and endoscopic procedures.
- 8) Be able to explain the differential diagnosis, evaluation, and management of abnormal vital signs in a post-op patient (i.e., tachycardia, fever, hypoxia, hypertension, hypotension) as well as postoperative complications. Know who to consult when needed.
- 9) Communicate clearly, concisely, and logically to colleagues, patients, and family members regarding the evaluation, management, and education of surgical conditions and surgical intervention.

**WOMEN'S HEALTH:** The Women's Health Course emphasizes the comprehensive care of the female patient, including preventive care and health maintenance, care of the mother and neonate, and patient education. Other principles include continuity of care, delivery of cost-effective quality care, and identifying supplemental sources of care within the community. Labor and delivery are not a required component of this clinical rotation.

### **PASSG 697 Women's Health Goals:**

- 1) Elicit and perform an appropriate OB/GYN history and physical exam for a patient presenting for a well-woman exam.
- 2) Elicit a problem-focused history and perform a targeted physical exam for a patient presenting for gynecologic, preconception, prenatal, obstetric, and postpartum care.
- 3) Describe the epidemiology, etiology, pathophysiology, clinical presentation, differential diagnosis, diagnostic evaluation, and management of emergent, urgent, and acute and chronic breast, vulvar, vaginal, cervical, uterine, and ovarian disorders as listed in the NCCPA PANCE Content Blueprint and the PAEA Women's Health End-of-Rotation Exam Topic List.
- 4) Be familiar with sexual development, menstrual physiology, menstrual disorders, infertility, menopause, hormone replacement therapy, and abnormal uterine bleeding.
- 5) Perform breast and pelvic exams as well as pap smears.

- 6) Be familiar with the supervision of normal pregnancy including but not limited to prenatal (fundal height, fetal heart tones, screening labs) and postnatal care, uncomplicated labor and delivery (stages of labor, fetal monitoring, APGAR scores), postpartum care, and lactation.
- 7) Be familiar with the supervision of abnormal pregnancy including but not limited to abortion, abnormal labor, ectopic pregnancy, and fetal growth abnormalities.
- 8) Order and interpret common laboratory and diagnostic studies, including but not limited to, urine/serum beta HCG, CBC, TSH, FSH, LH, progesterone, prolactin, UA, KOH/wet mount, NAAT, vaginal culture, pap smear, HPV, transvaginal/pelvic US, breast US, DEXA scan, and mammogram.
- 9) Summarize and select an appropriate contraceptive and family planning method based on indications, contraindications, side effects, complications, cost, and cultural/religious preferences.
- 10) Identify which over-the-counter and prescription medications are safe for use in pregnancy and lactation.
- 11) Identify and manage encounters associated with physical abuse, sexual assault, and domestic violence.
- 12) Be familiar with pre, intra-operative, and post-operative care of common gynecologic and obstetric surgeries. Understand the surgical technique of common gynecologic and obstetric surgeries. Participate in gynecologic and obstetric surgeries as able. Assist in cesarean/vaginal delivery as able.
- 13) Describe the indications, contraindications, side effects, and complications of common gynecologic procedures: i.e., IUD insertion/removal, colposcopy, D&C, LEEP, hysteroscopy, endometrial biopsy, etc.
- 14) Know the mechanism of action, indication, contraindications, side effects, and drug interactions of common pharmacologic agents used in the management of gynecologic and obstetric disorders.
- 15) Apply the principles of health promotion and disease prevention to describe and select appropriate preventative screening and health maintenance measures for women.
- 16) Communicate clearly, concisely, and logically to colleagues, patients, and family members regarding the evaluation, management, and education of gynecologic and obstetric disorders.
- 17) Be familiar with appropriate gynecologic and obstetric referrals.

**PSYCHIATRY:** The Psychiatry Course emphasizes the care of mental and emotional disorders. Clinical rotations may include the pharmacologic, behavioral, and/or psychoanalytic management of psychological disorders. Acute and chronic conditions may be encountered.

#### **PASSG 695 Psychiatry/Behavioral Health Goals:**

- 1) Be familiar with behavioral problems of childhood, neurodevelopmental disorders, domestic violence, eating disorders, sexual disorders/dysfunction, trauma, and end-of-life care.
- 2) Conduct a psychiatric evaluation to include a behavioral health interview and Mental Status Exam for initial and ongoing assessments.
- 3) Describe the epidemiology, etiology, pathophysiology, clinical presentation, differential diagnosis, diagnostic evaluation, and management of emergent, urgent, and acute and chronic mental and behavioral health disorders as per the NCCPA PANCE Content Blueprint and the PAEA Psych End-of-Rotation Exam Topic List.
- 4) Identify and manage patient encounters associated with physical abuse, sexual assault, and domestic violence, as able.
- 5) Demonstrate awareness of indications, contraindications, side effects, and adverse reactions of common pharmacologic medications used in the treatment of mental and behavioral health disorders (e.g., antidepressants, anti-anxiety, antipsychotics, mood stabilizers, stimulants, etc.).
- 6) Learn an effective referral process for someone who can benefit from psychotherapy, ECT therapy, community agencies, or other mental health professionals.
- 7) Review Motivational Interviewing and the Stages of Change model.
- 8) Be familiar with the withdrawal symptoms associated with alcohol and opioids.
- 9) Communicate clearly, concisely, and logically to colleagues, patients, and family members regarding the evaluation, management, and education of mental health disorders.
- 10) Acknowledge and maintain safety measures in working with behavioral health patients.
- 11) Understand the legal and ethical issues pertinent to the care of behavioral health patients including but not limited to HIPAA, confidentiality, mandatory reporting, etc.

**PEDIATRICS:** The Pediatrics Course emphasizes the comprehensive care of the patient under the age of 18 years old, including chronic and acute disease management, preventive care and health maintenance, and patient/family education. Other principles include continuity of care, delivery of cost-effective quality care, and identifying supplemental sources of care within the community.

### **PASSG 694 Pediatrics Goals:**

- 1) Elicit a comprehensive history and perform a complete physical exam on a newborn patient. Be able to identify congenital diseases.
- 2) Identify components of a thorough well-child exam including but not limited to obtaining a history and performing a physical exam, interpretation of growth charts, developmental milestones, Tanner staging, anticipatory guidance, and immunizations.
- 3) Complete well-child examinations for infants and children < 1 yr., 1-4 yrs., 5-11 years, and 12-17 years.
- 4) Know the focused history and targeted physical exam components of a sports physical and identify alarm signs/symptoms that warrant further evaluation before participation. Complete sports physicals.
- 5) Describe the epidemiology, etiology, pathophysiology, clinical presentation, differential diagnosis, diagnostic evaluation, and management of emergent, urgent, and acute and chronic pediatric conditions as noted in the NCCPA PANCE Blueprint and PAEA Pediatrics End-of-Rotation Exam Topic List.
- 6) Be familiar with common pediatric presentations including but not limited to eye pain, ear pain, rhinorrhea, sore throat, chest pain, abdominal pain, nausea/vomiting, diarrhea, constipation, rash, fractures.
- 7) Order and interpret common laboratory and diagnostic studies including, but not limited to, neonatal screening, visual acuity and hearing screening, vital signs and growth parameters, CBC, CMP, TSH, lipid panel, UA, GAS, mono spot, throat culture, ECG, and x-rays.
- 8) Describe the indications, contraindications, side effects, and complications of common procedures performed in the pediatric setting, including but not limited to venipuncture, immunization administration, ear irrigation, cerumen removal, tympanogram, toenail, or fingernail ablation/avulsion, I&D, and nebulizer treatment.
- 9) Demonstrate awareness of the indications, contraindications, side effects, and adverse reactions of common over-the-counter and pharmacologic agents used in the pediatric setting.
- 10) Demonstrate antibiotic stewardship.
- 11) Demonstrate the ability to calculate a pediatric dosage prescription.
- 12) Be familiar with preventative screening and health maintenance measures including but not limited to SIDS prevention, developmental milestones, nutrition, social determinants of health, vaccination, tobacco, alcohol and substance abuse, and high-risk behaviors.
- 13) Communicate clearly, concisely, and logically to colleagues, patients, and family members regarding the evaluation, management, and education of pediatric disorders.
- 14) Be familiar with appropriate pediatric referrals.
- 15) Maintain professional and ethical conduct related to HIPAA and confidentiality, consent, and mandatory reporting.

**FAMILY MEDICINE/PRIMARY CARE:** The Family Medicine/Primary Care Course emphasizes the comprehensive care of the patient and family, including chronic and acute disease management, preventive care and health maintenance, and patient/family education. Other principles include continuity of care, delivery of cost-effective quality care, and identifying supplemental sources of care within the community.

### **PASSG 692 Family Medicine Goals:**

- 1) Participate in the care of preventive, acute, and chronic patient encounters, across the life span, including infants, children, adolescents, adults, and the elderly.

- 2) Elicit a comprehensive history to include a history of present illness, past medical history, past surgical history, family history, and appropriate review of systems necessary to evaluate the chief complaint.
- 3) Describe the epidemiology, etiology, pathophysiology, clinical presentation, differential diagnosis, diagnostic evaluation, and management of emergent, urgent, and acute and chronic conditions common to the family medicine setting as indicated on NCCPA PANCE Content Blueprint and the PAEA Family Medicine End-of-Rotation Exam Topic List.
- 4) Select, collect, and/or interpret common studies used including but not limited to venipuncture, UA and drug screens, throat swabs, rapid strep testing, mono spot testing, vaginal secretions (KOH preps, wet mount, cultures), wound cultures, stool testing for occult blood, synovial joint aspirations, cardiac enzymes, and sputum cultures.
- 5) Order and interpret common laboratory and diagnostic studies used including but not limited to routine radiographic studies, advanced imaging (CT/MRI), pulmonary function testing, ECG, ultrasonography.
- 6) Describe the indications, contraindications, side effects, and complications of common procedures performed in the family medicine setting (i.e., SQ/IM injection, pap smear, immunization administration, joint injection, cryotherapy, ear irrigation, cerumen removal, finger/toenail removal, spirometry, shave and punch biopsy, infiltration with local anesthetic, digital block, and PPD skin test).
- 7) Know the mechanism of action, indication, contraindications, side effects, and drug interactions of common pharmacologic agents used.
- 8) Be able to recognize the need for referral to medical subspecialty or surgery consultation.
- 9) Apply principles of health promotion and disease prevention to describe and select appropriate preventative screening and health maintenance measures for patients across the lifespan presenting to the family medicine setting.
- 10) Communicate clearly, concisely, and logically to colleagues, patients, and family members regarding the evaluation, management, and education of conditions managed in the family medicine setting.

**ELECTIVE:** The Elective Course allows students to explore areas of interest in more depth. Students remain responsible for general rotation objectives. Additionally, students are encouraged to develop a list of objectives based on elective specialty. Students should emphasize conditions listed in the NCCPA content blueprint as well as principles of continuity of care, delivery of cost-effective quality care, and identifying supplemental sources of care within the commun

## **INSTRUCTIONAL OBJECTIVES**

**(A2.16a-c, A2.17, B1.01a-d, B1.03, B2.02a-e, B2.04, B2.05, B2.06a-f, B2.07a-f, B2.08a-d, B2.09, B2.10a-c, B2.12a-c, B2.14b, B2.19c, B3.03a-e, B3.04a-d, B3.05, B3.06a-c, B3.07a-g)**

The following set of professional, skills, and cognitive objectives are intended to serve as a guide for the student and the preceptor during the clinical rotation. In reviewing this list, the PA preceptor should be able to identify those areas in which they will be able to provide teaching encounters during the rotation based on the course description(s) and goals (B2.06). The student is responsible for learning all the material in these objectives even if a certain disease/disorder is not seen during the rotation. There may be an overlap of objectives between Family Medicine, Internal Medicine, Emergency Medicine, Pediatrics, Women's Health, Psychiatry, and Surgery.

## **PROFESSIONALISM OBJECTIVES:**

Upon successful completion of this course, the second-year PA student will be able to complete the following objectives:

- 1) Demonstrate appropriate professional interaction with patients.
- 2) Demonstrate appropriate professional interaction with healthcare professionals.
- 3) Dress professionally, appropriate to the rotation.
- 4) Demonstrate a positive attitude, showing enjoyment in work.
- 5) Accept feedback and advice as learning opportunities.
- 6) Take initiative and be a self-directed learner.
- 7) Cooperate with all staff.
- 8) Keep all office and patient information confidential.
- 9) Arrive on time for rotation and any assigned educational opportunities.
- 10) Handle stress and complexities of clinical situations well.
- 11) Complete assignments and chart work.
- 12) Exhibit self-confidence, knowing limitations.

## **SKILLS OBJECTIVES:**

During clinical rotations, the PA student is expected to advance their proficiency level from a fundamental awareness to either satisfactory, competent, or proficient ability in the areas listed below, as they pertain to each rotation. The following list of skills intends to serve as a guide for both the student and the preceptor during the clinical rotation.

### **History Taking and Physical Exam Skills:**

- 1) Elicit a chief complaint.
- 2) Obtain an accurate, concise history of present illness.
- 3) Obtain pertinent details of past medical history (e.g., medications, allergies, associated allergic reaction, chronic conditions, surgeries, immunizations, etc.)
- 4) Obtain appropriate family and social history.
- 5) Obtain a complete review of systems or relevant items for focused evaluation.
- 6) Perform problem-focused physical exams.
- 7) Perform several complete physical exams, either for routine well-person evaluation and screening or for patients' presenting complaints.
- 8) Identify pertinent positive physical findings.
- 9) Perform gynecological and breast exams; perform male genital and rectal exams.



## **Laboratory and Diagnostic Studies:**

**\*\*The following list intends to serve as a guide for the student and preceptor. Labs and diagnostic study exposure may vary based upon rotation type, setting, and available opportunities.\*\***

Select, collect, and/or interpret the following:

- 1) Blood for hematology & chemistry evaluations
- 2) Urinalysis/urine drug screens
- 3) Throat swabs
- 4) Rapid strep testing
- 5) Monospot® testing
- 6) Complete blood count, complete metabolic panel, and other blood/serum studies
- 7) Vaginal secretions (KOH preps/wet mount/cultures)
- 8) Wound cultures
- 9) Stool testing for occult blood and/or O&P
- 10) Synovial joint aspirations
- 11) Blood gases
- 12) Cardiac enzymes
- 13) Sputum cultures
- 14) Blood culture

## **Diagnosis Formulation**

(be able to order and make a preliminary assessment of the following diagnostic tests)

- Routine radiographic studies
- Pulmonary function tests
- Electrocardiogram
- Ultrasonography

## **Formulating Most Likely Diagnosis**

(includes oral presentation & documentation skills)

- Correlation between normal and abnormal diagnostic data.
- Formulation of differential diagnosis.
- Selection of most likely diagnosis in light of available data.
- Present the patient's case to the supervising preceptor in an organized, accurate, and concise manner.

## **Scientific Concepts**

- Understand the underlying pathologic processes or pathways associated with a given condition.
- Understand normal and abnormal anatomy and physiology.
- Understand normal and abnormal microbiology.

## **Clinical Interventions**

Observe, perform or assist with the following procedures: according to the standards taught by the preceptor and/or by the MWU PA Program.

*\*\*The following list is intended to serve as a guide for the student and preceptor. Diagnostic and therapeutic procedure exposure may vary based on rotation type, setting, and available opportunities.\*\**

- 1) Shave & punch biopsies
- 2) Cryotherapy
- 3) Ear irrigation
- 4) Suture/skin staple placement and removal
- 5) Snellen eye chart reading
- 6) Fluorescein eye staining & Wood's lamp exam
- 7) Joint aspiration
- 8) Injections: IM and SQ
- 9) Tonometry
- 10) Tympanogram
- 11) Infiltration with a local anesthetic
- 12) Digital block
- 13) Toenail or fingernail removal
- 14) Perform Slit-Lamp examination
- 15) Insert/remove skin staples
- 16) Drainage of subungual hematoma
- 17) Endotracheal intubation
- 18) Defibrillation
- 19) Cardioversion
- 20) Lumbar puncture
- 21) Thoracentesis
- 22) Paracentesis
- 23) Central line placement
- 24) Gastric lavage
- 25) Urinary catheter
- 26) Splint application
- 27) Anoscopy, sigmoidoscopy
- 28) Demonstrate sterile technique

#### **Non-Pharmacologic Clinical Interventions**

- Develop a treatment plan based on the most likely diagnosis.
- Select appropriate non-pharmacologic modalities.

### **Pharmacologic Clinical Interventions**

- Select appropriate pharmacologic agents for the most likely diagnosis.
- Demonstrate the ability to write prescriptions in the proper format.
- Demonstrate awareness of indications, contraindications, side effects, adverse reactions, and appropriate monitoring and follow-up of pharmacologic interventions.
- Observe and/or assist with the following procedures:
  - a. Joint injection
  - b. Injections: intramuscular and subcutaneous

### **Health Maintenance & Patient Education**

- Identify risk factors for conditions amenable to prevention or detection in an asymptomatic individual.
- Understand the relative value of common screening tests for conditions amenable to prevention or detection in an asymptomatic individual.
- Implement appropriate immunization schedules for infants, children, adults, and foreign travelers.

### **Provide patient education in the following areas**

- Management/treatment of common medical disorders.
- Side effects, risks, and benefits of both pharmacologic and non-pharmacologic treatment.
- Potential complications of medical disorders.
- Potential complications of treatment.
- Instruction to patients regarding follow-up.
- Counseling regarding exercise, nutrition, and weight loss.
- Instructions regarding preparation for diagnostic studies.

### **Medical Documentation**

Record data in a legible, organized format, using paper charting or electronic medical records (EMR). Use a full history and physical format or SOAP note format when appropriate.

### **COGNITIVE OBJECTIVES:**

During clinical rotations, the physician assistant student is expected to attain an adequate level of knowledge in the areas listed below. Adequate knowledge is defined as knowledge which, when combined with adequate skills, will allow the individual to do the following:

- Successfully manage a significant number of conditions one would expect to encounter in professional practice as a physician assistant.
- Appreciate the limits of their capabilities and promptly recognize those cases where the skills and talents of a physician or consultant are needed.
- Recognize the diversity of the patients they are treating and develop an understanding of the impact of race, ethnic and socioeconomic health disparities as they relate to health care delivery.
- Discuss the etiology and pathophysiology, signs/symptoms including physical examination findings, appropriate laboratory and/or diagnostic evaluation, medical management, complications, and patient education involved with the following medical disorders grouped by system.

## **The Dermatological System**

**Dermatitis:** atopic, contact, diaper, dyshidrotic, nummular, perioral, seborrheic, stasis, lichen simplex chronicus

**Benign and Malignant Neoplasms:** basal cell, melanoma, squamous cell, seborrheic keratosis, actinic keratosis

**Dermatophyte Infections:** tinea versicolor, tinea corporis, tinea pedis

**Bacterial Infections:** abscess, cellulitis, erysipelas, impetigo

**Parasitic Infestation:** pediculosis pubis, pediculosis capitis, scabies

**Viral Diseases:** condyloma accuminatum, herpes simplex, molluscum contagiosum, zoster/varicella

**Exanthems:** erythema infectiosum (fifth disease), hand-foot-and-mouth disease, measles

**Desquamation:** Stevens-Johnson Syndrome, Toxic Epidermal Necrolysis, erythema multiforme

**Acneiform Lesions:** acne vulgaris, rosacea, folliculitis

**Hair and Nails:** alopecia areata, alopecia androgenetic, onychomycosis, paronychia

**Melasma**

**Urticaria**

**Vitiligo**

**Papulosquamous Disorders:** drug eruptions, lichen planus, pityriasis rosea, psoriasis

**Vesiculobullous Disease:** pemphigoid, pemphigus

**Other:** burns, decubitus ulcers, venous stasis ulcers, ulcers associated with arterial insufficiency and diabetes mellitus, acanthosis nigricans, hidradenitis suppurativa, lipomas, epithelial inclusion cysts, pilonidal disease, erythema multiforme minor, erythema nodosum, cherry angioma, telangiectasia, and photosensitivity reactions

## **The Eye, Ear, Nose & Throat**

**Eye Disorders:** conjunctivitis, cataract, corneal ulcer, keratitis, pterygium, dacryocystitis, blepharitis, chalazion, ectropion, entropion, hordeolum, nystagmus, optic neuritis, papilledema, orbital cellulitis, macular degeneration, retinal detachment, retinopathy (diabetic and hypertensive), blowout fracture, corneal abrasion, globe rupture, hyphema, retinal vascular occlusion, amaurosis fugax, amblyopia, glaucoma, scleritis, and strabismus

**Ear Disorders:** cerumen impaction, otitis externa, trauma, acoustic neuroma, barotrauma, dysfunction of Eustachian tube, labyrinthitis, vertigo, cholesteatoma, otitis media, tympanic membrane perforation, hearing impairment, mastoiditis, Meniere disease, and tinnitus

**Foreign Bodies**

**Neoplasms:** benign and malignant

**Nose/sinus Disorders:** epistaxis, nasal polyps, rhinitis, sinusitis, trauma

**Oropharyngeal Disorders:** diseases of the teeth/gums, aphthous ulcers, candidiasis, deep neck infection, epiglottitis, herpes simplex, laryngitis, peritonsillar abscess, pharyngitis, sialadenitis, parotitis, trauma, and leukoplakia

## **The Cardiovascular System**

**Hypotension:** orthostatic/postural, cardiogenic shock, vasovagal

**Hypertension:** essential, secondary, hypertensive emergency

**Cardiomyopathy:** dilated, hypertrophic, restrictive

**Heart Failure**

**Conduction Disorders:** atrial fibrillation and flutter, atrioventricular block, bundle branch block, paroxysmal supraventricular tachycardia, premature beats, ventricular tachycardia, ventricular fibrillation, sinus arrhythmia, sick sinus syndrome, Torsades de pointes

**Coronary Artery Disease:** stable angina, unstable angina, variant (Prinzmetal) angina, acute myocardial infarction (ST and non-ST segment elevation)

**Vascular Disease:** acute rheumatic fever, arterial/venous embolism and thrombosis, chronic/acute arterial occlusion, giant cell arteritis, peripheral vascular disease, phlebitis and thrombophlebitis, varicose veins, aortic aneurysm/dissection, arteriovenous malformation

**Valvular Disease:** aortic stenosis/insufficiency, mitral stenosis/insufficiency, mitral valve prolapse, tricuspid stenosis/insufficiency, pulmonary stenosis/insufficiency

**Congenital Heart Disease:** atrial septal defect, coarctation of the aorta, patent ductus arteriosus, Tetralogy of Fallot, and ventricular septal defect

**Other Forms of Heart Disease:** endocarditis, acute pericarditis, cardiac tamponade, pericardial effusion

### **The Pulmonary System**

**Infectious Disorders:** acute bronchiolitis, acute bronchitis, influenza, types of pneumonia (i.e., bacterial, viral, fungal, HIV-related), epiglottitis, croup, pertussis, RSV, and tuberculosis

**Neoplastic Disease:** bronchogenic, carcinoid tumors, metastatic tumors, pulmonary nodules

**Obstructive Pulmonary Disease:** asthma, chronic bronchitis, bronchiectasis, emphysema, cystic fibrosis

**Pleural Diseases:** pleural effusion, pneumothorax

**Pulmonary Circulation:** pulmonary embolism, pulmonary hypertension, cor pulmonale

**Restrictive Pulmonary Disease:** idiopathic pulmonary fibrosis, pneumoconiosis, sarcoidosis

**Sleep Apnea**

**Other Pulmonary Disease:** hyaline membrane disease, ARDS, foreign body aspirations, and lung cancer

### **The Gastrointestinal/Nutritional System**

**Esophageal Disorders:** esophagitis, GERD, motility disorders, Mallory-Weiss tear, strictures, varices

**Gastric Disorders:** gastritis, peptic ulcer disease, upper GI perforation, pyloric stenosis

**Biliary Disorders:** acute/chronic cholecystitis, cholelithiasis, choledocholithiasis, cholangitis

**Hepatic Disorders:** acute/chronic hepatitis, cirrhosis

**Hernias**

**Infectious Diarrhea**

**Ingestion of Toxic Substances or Foreign Bodies**

**Metabolic Disorders:** G6PD deficiency, Paget disease, Phenylketonuria, and Rickets

**Neoplasms:** Benign and malignant

**Pancreas:** acute/chronic pancreatitis

**Small Intestine/Colon:** constipation, diverticular disease, abscess/fistula, anal fissure, fecal impaction, irritable bowel disease, inflammatory bowel disease, obstruction, ischemic bowel disease, toxic megacolon, appendicitis, Celiac disease, intussusception, polyps, hemorrhoids

**Nutritional Deficiencies:** Niacin, Thiamine, Vitamin A, Vitamin B12, Vitamin C, Vitamin D, Vitamin K

**Food Allergies and Food Sensitivities:** lactose intolerance, gluten intolerance, and nut allergies

**Hernia**

## **The Musculoskeletal System**

**Fracture/Dislocation:** hip, knee, ankle, shoulder, wrist, hand, rib

**Sprains/Strains:** ankle, knee, shoulder, wrist, back

**Hip Disorders:** aseptic (avascular) necrosis of the hip, slipped capital femoral epiphysis, developmental dysplasia

**Knee Disorders:** ligamentous tears of the knee, meniscus injuries, Osgood-Schlatter disease

**Shoulder Disorders:** rotator cuff tears, impingement syndrome, dislocation

**Elbow Disorders:** lateral and medial epicondylitis

**Wrist and Hand Disorders:** Colles fracture, scaphoid fracture, gamekeeper's thumb, boxer's fracture, carpal tunnel syndrome, De Quervain tenosynovitis

**Disorders of Back/Spine:** ankylosing spondylitis, back strain/sprain, cauda equina, herniated nucleus pulposus, kyphosis/scoliosis, low back pain (lumbago), spinal stenosis, thoracic outlet syndrome, torticollis

**Infectious:** acute/chronic osteomyelitis, septic arthritis

### **Compartment Syndrome**

**Neoplasms:** benign and malignant

### **Osteoarthritis**

**Rheumatologic Conditions:** fibromyalgia, gout, pseudogout, Juvenile rheumatoid arthritis, osteoporosis, polyarteritis nodosa, polymyositis, polymyalgia rheumatica, reactive arthritis (Reiter's syndrome), rheumatoid arthritis, systemic lupus erythematosus, systemic sclerosis (Scleroderma), and Sjögren syndrome

## **The Endocrine System**

**Diseases of the Parathyroid and Thyroid Gland:** hyperparathyroidism, hypoparathyroidism, parathyroid crisis, hyperthyroidism including Grave's Disease and thyroid storm, hypothyroidism, thyroiditis, myxedema coma

**Adrenal Disorders:** Cushing syndrome, primary adrenal insufficiency, adrenal crisis

**Pituitary Disorders:** acromegaly/gigantism, diabetes insipidus, dwarfism, pituitary adenoma

**Diabetes Mellitus:** Type 1, Type 2, metabolic syndrome

### **Hypoglycemia**

### **Diabetic Ketoacidosis**

### **Non-ketotic Hyperosmolar Coma**

### **Hypogonadism**

**Neoplasms:** multiple endocrine neoplasias (MEN), neoplastic syndrome, primary endocrine malignancy, syndrome of inappropriate antidiuretic hormone secretion (SIADH)

## **Psychiatric/Behavioral Science**

**Anxiety Disorders:** generalized anxiety, panic, post-traumatic stress, phobias

**Psychoses:** delusional disorder, schizophrenia

**Mood Disorders:** adjustment disorder, bipolar, depression, dysthymia, premenstrual dysphoric disorder, suicide/homicidal behaviors

**Eating Disorders:** anorexia, bulimia, obesity

### **Personality Disorders**

### **Obsessive-Compulsive and Related Disorders**

### **Conduct Disorder**

**Neurodevelopmental Disorders:** ADD/ADHD, Autism Spectrum Disorder

**Abuse and Neglect:** domestic violence, child/elder abuse, sexual abuse

**Human Sexuality**

**Substance-Related and Addictive Disorders**

**Dissociative Disorders**

**Feeding and Eating Disorders**

**Somatic Symptom and Related Disorders**

**Sleep-Wake Disorders:** narcolepsy, parasomnias

## **The Neurologic System**

**Cognitive Diseases:** Alzheimer disease, dementia, delirium

**Neuromuscular Disorders:** Guillain-Barre syndrome, myasthenia gravis, cerebral palsy

**Diseases of Peripheral Nerves:** diabetic peripheral neuropathy, Bell palsy, carpal tunnel syndrome, complex regional pain syndrome

**Movement Disorders:** essential tremor, Huntington's chorea, Parkinson's disease, multiple sclerosis

**Seizure Disorders:** generalized convulsive, generalized non-convulsive, focal seizures, status epilepticus

**Headaches:** cluster, migraine, tension

**Vascular Diseases:** cerebral aneurysm, cerebral vascular accident, transient ischemic attack, intracranial hemorrhage (epidural, subdural bleed, subarachnoid bleed), arteriovenous malformation, syncope

**Coma**

**Closed Head Injuries:** concussion, post-concussion syndrome, traumatic brain injury

**Infectious Disorders:** meningitis, encephalitis

**Hepatic and Alcoholic Encephalopathy**

**Skull Fracture**

**Neoplasms:** benign and malignant

## **The Genitourinary System (Male and Female)**

**Bladder Disorders:** incontinence, overactive bladder, prolapse

**Congenital and Acquired Abnormalities:** cryptorchidism, Peyronie disease, trauma, vesicoureteral reflux

**Human Sexuality**

**Infectious Disorders:** cystitis, epididymitis, orchitis, prostatitis, pyelonephritis, urethritis

**Neoplasms:** bladder cancer, penile cancer, prostate cancer, testicular cancer

**Nephrolithiasis/Urolithiasis**

**Penile Disorders:** erectile dysfunction, hypospadias/epispadias, paraphimosis, phimosis

**Benign Prostatic Hypertrophy**

**Testicular Disorders:** hydrocele, varicocele, testicular torsion, orchitis

**Urethral Disorders:** prolapse, stricture, urethritis

## **The Renal System**

**Acute Kidney Injury** (acute renal failure)

**Chronic Kidney Disease**

**End-Stage Renal Disease**

**Glomerulonephritis**

**Nephrotic Syndrome**

**Pyelonephritis**

**Congenital or Structural Renal Disorders:** horseshoe kidney, hydronephrosis, polycystic kidney disease, renal vascular disease

**Fluid and Electrolyte Disorders:** acid-base disorders, dehydration, hyperkalemia/hypokalemia, hypervolemia, hyponatremia

**Neoplasms:** renal cell carcinoma, Wilms tumor

## **The Reproductive System (Male and Female)**

**Breast:** mastitis, abscess, fibroadenoma, fibrocystic disease, galactorrhea, gynecomastia

**Cervix:** cervicitis, cervical dysplasia

**Vaginal/Vulvar Disorders:** cystocele, prolapse, rectocele, vaginitis

**Contraceptive Methods**

**Human Sexuality**

**Infertility**

**Menopause**

**Menstrual Disorders:** abnormal uterine bleeding, dysmenorrhea, amenorrhea

**Uterine:** endometriosis, leiomyoma, endometrial hyperplasia, prolapse

**Ovarian:** cysts, polycystic ovarian syndrome, tubo-ovarian abscess, torsion

**Neoplasms of the Breast and Reproductive Tract:** benign and malignant

**Sexually Transmitted Infections/Pelvic Inflammatory Disease**

**Trauma:** physical assault, sexual assault, trauma in pregnancy

**Uncomplicated Pregnancy:** normal labor/delivery, postnatal/postpartum care, preconception/prenatal care

**Complicated Pregnancy:** abortion, abruptio placenta, breech presentation, Cesarean delivery, cord prolapse, dystocia, ectopic pregnancy, fetal distress, gestational diabetes, gestational trophoblastic disease, hypertension disorders in pregnancy, incompetent cervix, multiple gestations, placenta previa, postpartum hemorrhage, premature rupture of membranes, Rh incompatibility, shoulder dystocia

## **The Hematologic System**

**Autoimmune Disorders**

**Coagulation Disorders:** factor VIII disorders, factor IX disorders, factor XI disorders, thrombocytopenia including idiopathic thrombocytopenic purpura and thrombotic thrombocytopenic purpura, Von Willebrand disease

**Anemias:** aplastic anemia, vitamin B12 deficiency, folate deficiency, iron deficiency, G6PD deficiency, hemolytic anemia

**Leukopenia**

**Hemoglobinopathies:** hemochromatosis, sickle cell disease, thalassemia



**Malignancies:** acute/chronic lymphocytic leukemia, acute/chronic myelogenous leukemia, lymphoma, multiple myeloma, myelodysplasia

**Immunologic Disorders:** transfusion reaction

### **Infectious Diseases**

**Bacterial Disease:** botulism, campylobacter jejuni infection, chlamydia, diphtheria, cholera, gonococcal infections, Methicillin-resistant Staphylococcus aureus, rheumatic fever, salmonellosis, shigellosis, tetanus, Rocky Mountain spotted fever

**Parasitic Disease:** helminth infestations, malaria, toxoplasmosis, pinworms, trichomoniasis

**Mycobacterial Disease:** tuberculosis, atypical mycobacterial disease

**Viral Diseases:** congenital varicella, varicella-zoster infections, CMV infections, human immunodeficiency virus, human papilloma virus, influenza, Epstein-Barr virus, erythema infectiosum, measles, mumps, rubella, rubeola, rabies

**Fungal Disease:** candidiasis, cryptococcosis, histoplasmosis, pneumocystis

**Spirochetal Disease:** Lyme borreliosis, syphilis

## **LEARNING OUTCOMES (B1.03)**

Following successful completion of clinical rotations, the clinical year student will:

- 1) Integrate critical thinking skills with evidence-based medical knowledge and patient care to provide entry-level primary health care services for a diverse population in a variety of settings.
- 2) Understand the basic scientific principles of anatomy, physiology, pathophysiology, and pharmacology necessary to practice medicine as a physician assistant.
- 3) Assess the health status of individuals of all ages by obtaining a history and physical examination, recommending and interpreting appropriate diagnostic studies, diagnosing, formulating appropriate differential diagnoses, and developing a management plan for primary care conditions.
- 4) Apply the principles of health promotion and disease prevention to provide primary health care across the life span.
- 5) Recognize health disparities and social determinants of health in the delivery of patient care.
- 6) Provide counseling, patient education, interventions, and appropriate referral for promotion, maintenance, and restoration of optimal levels of health for individuals of all ages.
- 7) Refine interpersonal and communication skills to result in effective information exchange with patients, families, and members of the professional health care team.
- 8) Develop professional accountability to patients, society, and the profession, and a commitment to excellence, integrity, and ongoing professional development.
- 9) Demonstrate a high level of responsibility and ethical practice while acknowledging professional and personal limitations.
- 10) Understand the importance of the team approach to health care and work closely with health care professionals to develop trusting relationships and strong medical practice ethic.
- 11) Recognize the importance of provider wellness and implement strategies to mitigate and prevent stress and burnout.
- 12) Engage in self-reflective practice to identify opportunities for growth and develop a tailored self-directed learning and professional development plan.
- 13) Incorporate constructive feedback in all professional endeavors.

## **COURSE TEXTBOOKS**

### **EMERGENCY MEDICINE**

- 1) Yeh D, Marthedal E. *The Physician Assistant Student's Guide to the Clinical Year: Emergency Medicine*. New York, NY: Springer Publishing Company, LLC: 2020.

### **FAMILY MEDICINE**

- 1) Kayingo G, Opacic D. *The Physician Assistant Student's Guide to the Clinical Year: Family Medicine*. New York, NY: Springer Publishing Company, LLC: 2020.

Recommended:

- Papadakis M, McPhee SJ, Rabow MW. *CURRENT Medical Diagnosis and Treatment 2023*. New York, NY: McGraw Hill; 2022.
- Wolff, K et al. *Fitzpatrick's Color Atlas & Synopsis of Clinical Dermatology*, 8th ed. New York, NY: McGraw-Hill; 2017.
- Gilbert, DN, et al. *The Sanford Guide to Antimicrobial Therapy 2022*, 52nd ed. Antimicrobial Therapy, Inc.

### **INTERNAL MEDICINE**

- 1) Knechtel D, Opacic D. *The Physician Assistant Student's Guide to the Clinical Year: Internal Medicine*. New York, NY: Springer Publishing Company, LLC: 2020.

Recommended:

- Kasper, DL et al. *Harrison's Principles of Internal Medicine*, 21th ed. New York, NY: McGraw-Hill; 2022.

### **PEDIATRICS**

- 1) Fernandez T, Akerman A. *The Physician Assistant Student's Guide to the Clinical Year: Pediatrics*. New York, NY: Springer Publishing Company, LLC: 2020.

Recommended:

- Hay WW, et al. (2022). *CURRENT Diagnosis & Treatment: Pediatrics*, 26th ed. McGraw-Hill.
- Kliegman, RM, et al (2019). *Nelson Textbook of Pediatrics*, 21st ed.
- American Academy of Pediatrics. *Red Book 2021: Report of the Committee on Infectious Disease*, 32<sup>nd</sup> ed.
- Gilbert, D et al. (2022). *The Sanford Guide to Antimicrobial Therapy*, 52nd ed. Antimicrobial Therapy.
- The John Hopkins Hospital, Engorn B. and Flerlage J. (2020). *The Harriet Lane Handbook*, 22nd ed.
- Polin R, Yoder M. *Workbook in Practical Neonatology*, 6<sup>th</sup> ed. Philadelphia, PA: Elsevier; 2019.

### **PSYCHIATRY / BEHAVIORAL HEALTH**

1. Cavalet J. *The Physician Assistant Student's Guide to the Clinical Year: Behavioral Health*. New York, NY: Springer Publishing Company, LLC; 2020.

Recommended:

- Ganti L, Kaufman, MS and Blitzstein, SM. *First Aid for the Psychiatry Clerkship*. 6th ed. New York, NY: McGraw Hill; 2021.
- *American Psychiatric Association: Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. Arlington, VA, American Psychiatric Association, 2022.

## SURGERY

1. Bowker B. *The Physician Assistant Student's Guide to the Clinical Year: Surgery*. New York, NY: Springer Publishing Company, LLC; 2020.

Recommended:

- Lawrence, Peter F. *Essentials of General Surgery*. 6th ed. Philadelphia, PA: Lippincott, Williams, Wilkins; 2018.
- Brunicaudi F. Andersen D. Billiar T. *Schwartz's Principles of Surgery*. 11th ed. McGraw-Hill Professional; 2019.

## WOMEN'S HEALTH

1. Watkins E. *The Physician Assistant Student's Guide to the Clinical Year: OB-GYN*. New York, NY: Springer Publishing Company, LLC; 2020.

Recommended:

- DeCherney AH et al. (2019). *Current Diagnosis & Treatment: Obstetrics & Gynecology*. 12th ed. McGraw-Hill: New York.
- Hatcher RA, Ziemann M, et al. (2021-2022). *Managing Contraception 2019-2020 (for your pocket)*. 16th ed.
- Szymanski LM, Bienstock, JL (2020). *The Johns Hopkins handbook of obstetrics and gynecology*. McGraw-Hill Education Medical.
- Beckmann CRB et al. (2018). *Beckmann and Ling's Obstetrics and Gynecology*. 8th ed., Lippincott, Williams & Wilkins: Philadelphia.

## ADDITIONAL RECOMMENDED RESOURCES

<a href="http://www.cdc.gov/vaccines">www.cdc.gov/vaccines</a>	Center for Disease Control: Most recent immunization schedules for children/adults; travel vaccine recommendations.
<a href="http://content.nejm.org/">http://content.nejm.org/</a>	Search "videos in clinical medicine".
<a href="http://www.epocratesonline.com">www.epocratesonline.com</a>	Online prescribing guide: can compare/contrast agents, assess drug interactions, etc.
<a href="http://www.uspreventiveservicestaskforce.org">www.uspreventiveservicestaskforce.org</a>	The United States Preventive Services Task Force; recommendations about preventive services in primary care.
<a href="http://prescriber.therapeuticresearch.com">http://prescriber.therapeuticresearch.com</a>	Therapeutic Research Center; concise, unbiased recommendations regarding medications.
<a href="https://www.uptodate.com">https://www.uptodate.com</a>	UpToDate; recent medical information in trusted, evidence-based recommendations.
<a href="https://www.paeaonline.org/assessment/end-of-rotation/content">https://www.paeaonline.org/assessment/end-of-rotation/content</a>	PAEA End of Rotation: Content; Topic Lists, Blueprints, and Core Tasks and Objectives

## COURSE REQUIREMENTS

- Refer to the “Evaluation and Assessment” section of this course syllabus.
- Students must submit clinical rotation absence requests per the clinical year policies.
- Students must maintain current immunizations; failure to do so will result in the Program dismissing the student from the clinical rotation. This constitutes a course failure.
- Students must maintain current health care insurance; failure to do so will result in the Program dismissing the student from the clinical rotation. This constitutes a course failure.
- Students must pass each required component of the course to successfully pass the course.
- Students must attend the clinical rotation as directed by the Program and the Preceptor. Unexcused absences may result in course failure.
- Students must adhere to the ethical standards of patient care. If patient information is posted on social media, all students involved will be subject to disciplinary action by the PA program and/or Student Services.

If the student is found to be practicing medicine without a license as described in this manual, disciplinary action against the student may include:

- 1) Failing the rotation, and/or
- 2) Academic suspension, and/or
- 3) Dismissal from the program, and/or
- 4) Program disclosure to subsequent state licensing or regulatory boards of this disciplinary action.

## REQUIRED COMPONENTS OF CLINICAL YEAR COURSES (B4.01a,b)

Students must pass each component to successfully pass each clinical rotation. **Course/rotation final grades are assigned by the Director of Clinical Education.**

Clinical Component	Grade
Mid-Rotation Evaluation of the Student	P/F
End-Rotation Evaluation of the Student	P/F
End-of-Rotation Examination (Rotation specific)	P/F
Activity Logs (Typhon reports) signed by Preceptor	P/F
Surgical Competency Checklist (core Surgery Course only)	P/F
Rotation Goals Form	P/F
Student Evaluation of Clinical Rotation Site/Preceptor (on Typhon)	P/F
Student Professionalism	P/F
<i>*A description of each clinical component and requirements for a passing grade can be found in the Clinical Year Manual. See “Table of Contents” for page numbers.</i>	

## REMEDIATION (B4.01a,b)

Students may be allowed one opportunity to remediate the End-of-Rotation Exam. Unsuccessful remediation will result in course failure.

## EVALUATION OF COURSE AND INSTRUCTORS (C1.01a-d,g, C1.02a-c, C2.01a-c)

The student will evaluate the course as a whole and the clinical preceptor's effectiveness after the course, utilizing the Typhon online system. Constructive student input is very helpful and encouraged.

## EXPECTATIONS OF THE COURSE COORDINATORS

The course coordinator(s) will be available for student questions and/or discussion during office hours and by appointment. The course coordinator(s) will answer all student emails and phone calls within 48 hours (or two working days). The course coordinator(s) will model professional behavior and treat all students respectfully.

The course coordinator(s) will:

- 1) Provide a course syllabus and course schedule at the beginning of the clinical year and oversee the administration of evaluation tools and methods.
- 2) Facilitate the identification of useful learning resources in all core medicine and surgery courses.
- 3) Provide a respectful and safe learning environment.
- 4) Provide meaningful feedback to learners.
- 5) Ensure that all learners have equal opportunities to achieve the course objectives.
- 6) Assign the final grade for the course.

## EVALUATION AND ASSESSMENT (B4.01a,b)

The following sections discuss the required rotation documents, assessments, grading criteria, and remediation policies during the clinical year. These components are required for each course (rotation) for all students. The student must complete and/or pass each component to successfully pass the designated course. All rotations are graded as Pass/Fail.

Course failures during the clinical year are assigned by the Director of Clinical Education and are subject to review by the PA Academic Review Committee (ARC) and the College of Health Sciences (CHS) Promotion and Graduation Committee equivalent to any other course failure (i.e., a failure in the didactic year), per the MWU Catalog, CHS Section. Course failures are cumulative throughout the didactic and clinical curricula. Please refer to the MWU – Glendale, AZ Grade Appeals Policy for further information.

## REQUIRED ROTATION DOCUMENTS

Due at mid-point of EACH rotation:

- 1) Mid-Rotation Preceptor Evaluation of the Student (signed by both preceptor and student).

Students are responsible for the submission of all documents. **Documents must be uploaded to Canvas before 4 pm on the Wednesday of week 3 of each rotation.**

Due at the end of EACH rotation:

- 1) End Rotation Preceptor Evaluation of the Student (signed by both preceptor and student).
- 2) Typhon Activity Logs – Patient Case Logs-Graphical Version (correctly filtered to match RMS with front sheet signed by both preceptor and student) and Time Log.
- 3) Student Evaluation of the Preceptor and Site (completed on Typhon).
- 4) Rotation Goals Form (core AND elective rotations).
- 5) Surgical Competency Checklist (core Surgery rotation only).

Students are responsible for the submission of all documents. **Documents must be uploaded to Canvas before 4 pm on TUESDAY following the final day of each rotation.**

Failure to submit any or all of these items on time may result in a Non-Disciplinary Incident Report by the Director of Clinical Education. **If the materials are not submitted by 5:00 pm on the second business day from date of issuance of the Incident Report, the student may receive a course/rotation failure at the discretion of the Director of Clinical Education.**

If a student encounters difficulty or anticipates a delay in obtaining or completing any of the required rotation documentation due to circumstances beyond their control, the student must notify a Clinical Coordinator by phone or email *before* the deadline.

### **MID-ROTATION PRECEPTOR EVALUATION OF THE STUDENT (B4.01a,b, B4.04a,b)**

The Mid-Rotation Evaluation provides the student, preceptor, and program with formative (e.g., in-progress) evaluation data. This evaluation enables the preceptor to provide the student with written feedback regarding areas of strength and/or weakness, and the program of concerns or deficiencies that may require remediation. **The PA Program strongly encourages students to discuss their evaluation scores/comments with the preceptor as well as discuss any personal goals or objectives they have for the remainder of the rotation.**

It is the student's responsibility to provide a copy of the Mid-Rotation Evaluation form to the preceptor(s) at the midpoint of all rotations. It is recommended the student provide the evaluation form to their preceptor 3-5 days before the due date to allow adequate time to complete the form. Evaluation forms should be completed by the provider(s) with whom the student spent the majority of their rotation working with.

**The student may submit up to three separate preceptor evaluations per rotation site (based on providers worked with).** It is expected that students submit at least one Mid-Rotation Evaluation from a preceptor who will also be completing an End Rotation Evaluation.

If a student receives a concerning score(s) by the preceptor at the mid-point of the rotation, the Clinical Coordinator(s) will work with the preceptor and student to create a plan to improve student performance during the second half of the rotation. The Clinical Coordinator(s) may recommend the following interventions or others as appropriate:

- 1) The student will remain at the site and utilize a plan developed by the Clinical Coordinator(s) to improve student performance during the second half of the clinical rotation, and/or
- 2) The student may be removed from the site, receive a failing grade for the rotation, and be required to remediate all or a portion of the rotation at a later date, and/or
- 3) The student may be placed at an alternate university arranged site(s) for the student's performance to be evaluated more frequently, and/or
- 4) The student may need to complete intensive remediation that is customized to their area(s) of weakness (e.g., case reviews, standardized patient examinations, weekly meetings, etc.) and/or
- 5) The student may be subject to a complete evaluation by Student Services. The Dean of Students and the individual college deans reserve the right to require a student to undergo a medical assessment if their physical and/or mental status is determined by the deans to warrant concern. Such circumstances are only enacted when it is determined that the personal well-being of the student is in question, or when the student is suspected of being a threat to their well-being or the well-being of others.

### **END ROTATION PRECEPTOR EVALUATION OF THE STUDENT (B4.01a,b, B4.04a,b)**

The End Rotation Evaluation of the Student provides the student, preceptor, and program the opportunity to assess the student's clinical progress, professionalism, and achievement of stated objectives over the rotation period. Students should provide a copy of the End Rotation evaluation form to the preceptor(s) at least 3-5 days before the conclusion of the rotation. The PA Program strongly encourages students to discuss the evaluation with the preceptor. The evaluation form must be signed by both the student and the preceptor and submitted on Canvas by the published deadline.

Late evaluation submissions may result in a non-disciplinary incident report and/or rotation failure.

If a student receives a concerning low score(s), or the preceptor has reservations regarding the student passing the rotation, the Clinical Coordinator(s) will determine if the preceptor evaluation of the student justifies a course/rotation failure (e.g., patient safety concerns). In certain circumstances, the student may not receive a course failure, however, they may need to repeat the core rotation or a primary care-based rotation in place of their elective rotation at the discretion of the clinical team. The decision of a course/rotation failure may be made regardless of overall performance on other rotation assessment components.

Course/rotation final grades are assigned by the Director of Clinical Education. Course failures will result in review by the PA Program Academic Review Committee, which may recommend the following intervention(s), or others as appropriate, based on the Preceptor's evaluation and/or overall student performance:

- 1) The student may be required to repeat the rotation at a local MWU-approved site(s) for the student's performance to be evaluated more frequently, and/or
- 2) The student may be required to complete all subsequent rotations within Arizona, and/or
- 3) The student may need to complete intensive remediation that is customized to their area(s) of weakness (e.g., case reviews, standardized patient examinations, weekly meetings, etc.), and/or
- 4) The student may be subject to a complete evaluation by Student Services, and/or
- 5) The student may need to forgo an elective rotation.

## **STUDENT EVALUATION OF THE PRECEPTOR AND SITE (C2.01a-c)**

Students are required to complete an evaluation of the site and preceptor(s). This evaluation will be completed on Typhon after each clinical rotation, including elective rotations. **The Student Evaluation of the Site must be submitted via Typhon no later than 4:00 pm the TUESDAY following completion of the rotation.**

**Students should only submit one evaluation per rotation** (there is the opportunity to evaluate/comment on multiple preceptors within the evaluation). It is unnecessary to print the evaluations as the PA Program can access these online.

## **ROTATION GOALS FORM**

As students move through the clinical year of training it is vital to recognize there is more at stake than simply passing exams and graduating. The clinical year is also about becoming a safe, competent provider, an effective health care team member, one who upholds the integrity of the PA profession, and a steward of health care, public safety, and wellness for their community.

Students are required to review clinical rotation objectives before each rotation and self-reflect on their academic and clinical performance. They should compile three goals they hope to achieve on the rotation and identify strategies in advance, which they can implement to help to achieve their goals. Students should discuss their Rotation Goals Form with their preceptor at the onset of the rotation to help facilitate a tailored educational experience.

Following every rotation, students are required to indicate whether they were able to achieve their three goals. If not, they must indicate perceived barriers or challenges they encountered and provide potential strategies/resources to help with goal attainment.

The Rotation Goals form is to be submitted on Canvas by the published deadline.

## **TYPHON ACTIVITY LOGS (B4.01a,b, B4.04a,b, C2.01a-c)**

Students are required to document ALL of their clinical education experiences and time on rotation. This is a PA Program and accreditation requirement. To accomplish this, the program utilizes a web-based activity logging system through Typhon.

Students must document their hours spent on rotation and their daily patient experiences; patient case logs should include diagnosis (ICD-10) and procedural (CPT) codes. Activity Logs are required for all rotations, including electives and “make-up” days.

Students should be as accurate and as complete as possible when compiling data, as this information may support student or graduate application(s) for post-graduate fellowships, credentialing at hospitals/clinics, etc.

For each rotation, students should follow the steps below to complete a case log:

- 1) Maintain a list of (**observed and participated in**) **patient encounters** while on rotation, including age, diagnoses, and any pertinent procedures.
- 2) Indicate surgical management if applicable (pre-operative, intraoperative, post-operative, etc.).
- 3) Under Case Log Management in Typhon, go to “Add New Case Log”.
- 4) Enter all required student information in the first field. **Please log all encounters under the designated preceptor and site in your RMS schedule** even when working with multiple providers.
- 5) Log each patient encounter and include all “clinical information” (insurance information not necessary) and appropriate ICD-10 and CPT codes. Please refer to *Typhon Patient Logging* PowerPoint on Canvas PCP III course for more information.
- 6) At the end of the rotation, **filter patient encounters by rotation period, rotation type, and preceptor name** then print the Case Log Totals - Graphical Version, including the list of ICD-10 and CPT codes.
- 7) Have your preceptor sign the front page of the printed log. The student should also sign the log. Signature by each serves as verification of the activities.
- 8) **Submitting a Time Log is also required.**
- 9) Submit the activity logs and time logs on Canvas by the published deadline.



## END-OF-ROTATION EXAMINATION (EOR) (B4.01a,b)

After each **core rotation**, the student will complete a corresponding PAEA End of Rotation™ Exam based on the rotation-specific content Blueprints and Topic Lists provided by PAEA. These can be found at <https://paeaonline.org/assessment/end-of-rotation/content/>. Exams are 120 multiple-choice questions and are created by PA educators and exam experts to be used specifically by PA programs.

### **Remote EOR Exam Eligibility and Instructions – MonitorEDU**

Students completing rotations > 50 miles outside of the Greater Phoenix Area may be allowed to take their End of Rotation Exam utilizing MonitorEDU (third-party live online proctoring service). **Students are responsible for all associated costs.** Practice exams are \$5.00. EOR exams are \$15.00. Google Meets is the primary video connection app. Students may use their mobile device or their internal desktop/laptop webcam to be live monitored. Students should visit <https://monitoredu.com/faq> for additional information.

#### Steps for scheduling and deploying an off-campus EOR:

Students must email Ms. Funk their request a **minimum of 2 weeks in advance** of the scheduled exam test date (not applicable for CAD).

On exam day:

- Make sure your phone/desktop/laptop is fully charged and plugged into its charger.
- Make sure your Wi-Fi is connected.
- Make sure your testing area is clean and you only have the resources allowed (one single sheet of blank paper). The proctor will have you remove any items that are not allowed (textbook references, etc.)
- Make sure your testing area is well lit.
- The room should be quiet.
- Pay for your exam and keep your receipt number (if applicable).
- Prior to starting the exam, display your MWU student ID to proctor for verification along with your single sheet of blank paper.
- Bathroom breaks are permitted; however, the exam does not pause while you are away.
- Sign into examdriver.com to complete the exam.

## EOR EXAM SCORING

Students will receive a scaled score (300-500) from PAEA. **A scaled score that is  $\geq$  two standard deviations below the national mean for that exam type is considered a failing score.** Please allow 24-48 hours for a review of all students' scores. Students who fail an EOR exam will be notified via email by the Director of Clinical Education and will receive an 'In-progress' grade notation for the course, pending remediation.

Remediation must be completed before the next clinical year assessment. The date and time of the remediation will be determined by the Clinical Coordinator(s). Failure to successfully pass the remediation examination will result in a course/rotation failure. A course failure will result in review by the PA Program Academic Review Committee (ARC), which may recommend one or more of the following interventions, or others, as appropriate:

- The student may be required to repeat a rotation at an alternate university arranged site(s), and/or
- The student may be required to complete all subsequent rotations within Arizona, and/or
- The student may be subject to a complete evaluation by Student Services, and/or

- The student may need to complete intensive remediation that is customized to their area(s) of weakness (i.e., case reviews, standardized patient examinations, weekly meetings, etc.).

### **Policy for “At-Risk” Students**

This policy is meant to identify students who are “at-risk” of course failure, failure to meet Program competencies, and failing the Physician Assistant National Certification Examination (PANCE) as first-time test takers. It is meant to enhance the student’s general medical knowledge, clinical decision-making and judgment, and preparedness for the PANCE.

**Any student with End-of-Rotation (EOR) exam scores during Rotations 1-4 that total 3 or more standard deviations below the national means will lose their elective rotation.**

- 1) The student’s elective will be scheduled/re-scheduled by the Program at an established Internal Medicine rotation site, and
- 2) The student will be required to take the PAEA Internal Medicine EOR exam. If the student has already taken the Internal Medicine EOR exam, a second version of the PAEA Internal Medicine exam will be assigned. If the student has already taken both versions of the PAEA Internal Medicine EOR exam, a version of the PAEA Family Medicine EOR exam will be assigned.
- 3) Pending site/preceptor availability and student performance, the above accommodation may necessitate a rearrangement in the student’s schedule.
- 4) Students who are struggling to master knowledge and skills are encouraged to engage in self-directed learning to strengthen their educational training. Multiple resources are available; including but not limited to, Access Medicine, Exam Master, MedChallenger, Aquifer, etc.

## **PROFESSIONALISM DURING CLINICAL ROTATIONS**

Students are expected to adhere to standards of professional behavior at all times. Failure to exhibit professional behavior during a clinical rotation may jeopardize the student’s continued participation in the Physician Assistant Program. Issues surrounding unprofessional behavior will be brought before the Clinical Year Committee (CYC).

**Should the CYC find that a student has behaved unprofessionally, they may be issued a non-disciplinary incident report, issued a disciplinary incident report, lose their elective rotation, and/or receive a failing grade for the course.**

Violations of program policies regarding professional behavior include **but are not limited to:**

- 1) Preparedness
- 2) Responsibility
  - Failure to perform all or part of assigned tasks and responsibilities.
  - Failure to follow protocol, or directions of supervising physician, physician assistant, or program faculty.
  - Performing unauthorized procedures or administering services not permitted by the supervisor, the facility, or the physician assistant program.
  - Failure to identify oneself as a physician assistant student, especially after being addressed as “Doctor”.
  - Failure to report all observed unethical conduct by other members of the health profession, including other students.
- Attendance/Punctuality
  - An unexcused absence during the clinical year.
  - Excessive (>7) excused absences during the clinical year.
  - Excessive lateness during the clinical year.

- Unauthorized departure from the clinical setting.
- 3) Respect
    - Violation of the Health Insurance Portability and Accountability Act (HIPAA).
    - Insensitivity to patients; lack of respect for the rights of patients to competent, confidential service.
    - Endangering the health and welfare of any patient.
  - 4) Conduct/Maturity
    - Failure to accept constructive criticism.
    - Immature demeanor.
    - Unacceptable dress in the clinical arena.
    - Academic or personal dishonesty.
  - 5) Communication
    - Text messaging and/or use of cell phones with internet access for non-educational purposes.
    - Failure to submit an occurrence report (accidental exposure, needle stick, etc.) both to the Program and the Office of Risk Management.

## **ACADEMIC HONESTY**

Academic/professional honesty and integrity are expected of all students throughout their course of study at Midwestern University. Students are to maintain a decorum and demeanor that is consistent with accepted academic and professional standards during examinations and on clinical rotations per Midwestern University policy. If online testing platforms are utilized, students will complete all online examinations and assessments independently without accessing any outside resources (PowerPoint, internet, peers, etc.).

Acts of dishonesty, including but not limited to, cheating, fabrication, or plagiarism in any form during exams and on clinical rotations will be further investigated and will be strictly dealt with as described in the Midwestern University Student Handbook. Please refer to the PA Program Academic Policies for details regarding plagiarism.

## **ACADEMIC AND CLINICAL YEAR POLICIES**

Students are expected to follow the academic policies as outlined by the PA Program and in the Midwestern University CHS College Catalog. Students are also expected to follow the clinical year policies described in the Clinical Year Manual. Every attempt is made to provide a complete syllabus that provides an accurate overview of the course. However, circumstances and events may make it necessary for the instructor to modify the syllabus during the clinical year. This may depend, in part, on the progress, needs, and experiences of the students.

The course coordinators reserve the right to make changes in the course syllabus. If changes are made, students will be notified in writing. The students are required to check their Midwestern University email account daily so that timely communication can be maintained in this course.

## **DISABILITY STATEMENT**

It is the policy of Midwestern University to ensure that no qualified student with a disability is excluded from participation in or subjected to discrimination in any University program, activity, or event. Student Services coordinates accommodations for all eligible students. If you need accommodations for a disability, please contact Student Services as soon as possible by email or by phone.

**Contact Information for Glendale Campus Student Services:**  
Dr. Shannon Sesterhenn, M.S., Ed.D.

Associate Dean  
Phone: 623-572-3357  
Email: [sseste@midwestern.edu](mailto:sseste@midwestern.edu)

It is the student's responsibility to identify themselves in a timely manner as an individual with a disability when seeking an accommodation.

More information regarding available services can be found at:  
[https://www.midwestern.edu/glendale\\_campus/student\\_services/disability\\_services.html](https://www.midwestern.edu/glendale_campus/student_services/disability_services.html)