PHYSICIAN ASSISTANT PROGRAM

Master of Science in Health Sciences for Physician Assistants

CLINICAL YEAR GUIDELINES & SYLLABUS

2024-2025

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Director of Clinical Education

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GENERAL GUIDELINES FOR PHYSICIAN ASSISTANT STUDENTS ON CLINICAL ROTATIONS

The following represents the general guidelines and syllabus for the Weill Cornell Medicine MSHS Physician Assistant students while functioning on the clinical rotations at New York Presbyterian Hospital-Cornell Campus and/or affiliates. **The material outlined in this syllabus is subject to change by the Program, Weill Cornell Medical College and/or Cornell University.** Students are advised to refer to the *WCGS MSHS Physician Assistant Program Student Handbook* for specific Policies and Procedures regarding their responsibilities as students in the MSHS PA Program.

While functioning on the clinical rotations, the Physician Assistant (PA) student will be under the general medical supervision of an attending physician and under the direct supervision of an attending physician, house staff physician or physician assistant assigned by an attending physician. The preceptor will see and examine every patient seen by the PA student. All invasive procedures will be performed under the direct supervision of the preceptor. All laboratory, radiological and medical record entries (i.e., notes, orders) will be co-signed by the preceptor prior to their implementation. PA students may <u>not</u> discharge inpatient, outpatient or emergency department patients until the supervising preceptor has seen the patient and discussed plans, instructions and/or follow-up care with the student and patient.

The following identifies the activities that a PA student may in all cases initially observe, secondly assist with and thirdly perform while under the direct supervision of the physician or physician assistant preceptor.

1. Provide medical care under the direct supervision and co-signature of a physician, physician assistant, or other licensed professional preceptor for the following:

- Perform a detailed and accurate history and physical as patient appropriate.
- Initiate laboratory, radiologic and special examination procedures as appropriate for the evaluation of illness.
- Initiate appropriate treatment based upon the presenting diagnosis and escalate care and/or obtain as indicated.
- Instruct patients regarding therapy in a comprehensive and thorough fashion.
- Record appropriate information including admission notes, progress notes, intra-operative notes, post-operative notes, and discharge summaries in the medical record.
- Obtain review and countersignature of the supervising physician on all medical records.
- Write admission and/or other orders (including medications) while at New York Presbyterian Hospital-Cornell Campus and/or other affiliates where permitted. Obtain review and countersignature of the supervising physician.

General Guidelines Continued:

2. Perform the following functions in the operating room under the direct supervision of the designated preceptor:
   - Prepare and drape the patient prior to surgery.
   - Serve as an assistant to the surgeon during surgical procedures.
   - Assist in closure of surgical wounds and post-closure sterile dressing of surgical wounds.
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3. Perform the following diagnostic and therapeutic procedures under the direct supervision of the designated preceptor:
   - Evaluate and participate in the treatment of non-life threatening, well-defined conditions. Initiate the evaluation of less well-defined or emergency conditions.
   - Evaluate and participate in ACLS therapies.
   - Endotracheal intubation, insertion of an oral airway, suctioning and use of bag- valve-mask ventilation devices and application of oxygen therapy.
   - Venipuncture, arterial puncture, intravenous catheterization with fluid therapy and venous cutdown.
   - Intradermal, subcutaneous, and intra-muscular injections and administration of medications in accordance with Hospital and/or Nursing guidelines.
   - Cardiopulmonary resuscitation including use of AED, defibrillation and/or synchronized cardioversion.
   - Perform and interpret electrocardiograms.
   - Fracture immobilization including application and/or removal of casting or splinting material.
   - Gastrointestinal intubation (nasogastric tube insertion).
   - Urethral catheterization in males and females.
   - Thoracentesis and chest tube insertion for pleural effusion, pneumothorax or as appropriate during the emergency treatment of traumatic injuries.
   - Wound care and suturing techniques.
   - Lumbar puncture.
   - Paracentesis and peritoneal lavage procedure.
   - Central venous catheter insertion via subclavian, internal jugular and femoral vein approaches.
   - Assist in endoscopic procedures such as sigmoidoscopy.

4. Further permitted functions of physician assistant students while on clinical rotations as well as specific attitudinal and behavioral objectives may be found in the individual core and elective clinical rotation goals and objectives.

CLINICAL ROTATION GUIDELINES

1. All clinical rotations are four weeks in length and begin on a Monday unless otherwise indicated. All decisions regarding the assignment of the core and elective clinical rotations are made by the Clinical Directors. **There will be no changes in the clinical rotation schedule unless approved by the Director of Clinical Education.**

2. Attendance on rotations is mandatory. Absences must be reported verbally to the supervising clinical preceptor, assigned preceptor and the Program office by 9:00 am (messages may be left on 646-962-7277). Students **must** also e-mail the Director and Assistant Director of Clinical Education by 9:00 am of the day of absence. Requests for planned absences must be made in writing (*Absence Request* forms are available on-line in Exxat/Prism) a minimum of 2 weeks prior and submitted to the Director of Clinical Education or Assistant Director of Clinical Education for approval. However, students are encouraged to submit absence requests as far in advance as possible. All requests must be submitted in writing in order to be considered.

   It may be required that any time (no matter the reason) missed on a clinical rotation be made up. All missed time is to be discussed with the Director or Assistant Director of Clinical Education. Failure to notify the Program and/or preceptor of absences or failure to make up the missed time within 24 hours of occurrence may result in deduction of (5) points from the student overall grade for the rotation.
   Continuation of such behavior may result in disciplinary action. Time may be made up during vacations and weekends or at the end of the clinical year with Clinical Director approval. Missed time must be completed before a certificate of completion or a degree will be awarded. Students must provide written documentation of the time made up signed by the preceptor. The Director of Clinical Education must be made aware of when the time is being made up.

   Students are expected to leave the rotation when released by the preceptor. Students are not permitted to leave the rotation based on a 'shuttle' or transportation schedule.

   A preceptor must be present while a student is on a rotation, therefore in the event that a student misses a day from a rotation due to preceptor absence, the student must notify the Director of Clinical Education to discuss the situation and ensure the required contact hours are met.

   Students must attend the rotation on the day prior to the End of Rotation meeting. Students who fail to do so will lose five (5) points from their overall grade for the rotation. If this subsequent loss of points results in a failure of the rotation, the rotation must be made up as outlined below.

   Holiday/Vacation Time off: Students are not permitted to miss the first scheduled day of the rotation or the day prior to or after a scheduled holiday or vacation. Students are expected to be at their rotations until released by the preceptor. Many rotations require weekend and night call; therefore, students should not assume that a holiday will include a concurrent weekend and must discuss the expectations with the preceptor prior to making any travel arrangements. Students are not permitted to miss the first day back from a scheduled holiday or vacation. As such, students are expected to make all travel arrangements to ensure they comply with this requirement. Students are advised to leave themselves one extra travel day in case of travel delays and/or cancellations.

   Students are expected to be present on the first day of all rotations unless directed by the preceptor.

Clinical Rotation Guidelines Continued:

Time off limits: Students may miss up to five (5) excused days due to illness or other emergencies throughout the entire clinical phase of the Program; students may also request up to three (3) excused personal days throughout the clinical phase. Students may take no more than two (2) sick or personal days during a single rotation. Students may not miss more than 8 excused days throughout the entire clinical year of 15 rotations.

Students who are out from rotations more than two (2) consecutive days due to illness must submit a medical provider's note to Student Health Services stating that they were seen and may return to rotations without restrictions.

Students who experience a significant illness or injury must notify the PA Program and report to Student Health Services for evaluation for medical clearance prior to returning to clinical rotations.

Medical clearance must be provided to Student Health Services by the student and issued by a clinical provider, stating that the student is able to return to duty. Any restrictions will be evaluated according to the Disability Services Guidelines in Appendix A at the end of this document.

As a reminder, per the discretion of the Director of Clinical Education and/or the clinical preceptor, students may be required to make up any time missed during a rotation, no matter the cause.

In the event of an extended absence (more than five (5) days missed in any given clinical rotation. Students who anticipate an extended absence should discuss their situation with the Director of Clinical Education prior to the absence to make appropriate arrangements for making up time missed. **Excessive absenteeism and tardiness will be reviewed by the Committee on Promotion and Graduation and may be grounds for dismissal from the Program as per the *Standards of Conduct.***

3. Physician Assistant students are required to display their ID at all times and identify themselves as PA students. Students are expected to present a neat, clean, professional appearance at all times. Appropriate dress as directed by clinical preceptors is required.
    - The NYP policy includes:
        - The wearing of green scrubs is prohibited in non-patient care areas, including the Medical College library, cafeteria, and laboratories.
        - The wearing of green scrubs by all personnel in non-surgical patient care areas or special care areas is prohibited.
        - The wearing of green scrubs outside of the Medical Center or to enter or exit the Medical Center is strictly prohibited.
        - Inappropriately dressed students may be sent home from rotations and/or rotation meetings and will lose 5 points from the overall rotation grade for each infraction.
        - Students can always refer to the formal NYP Scrub policy available on the NYP website.
    - If an accommodation is requested regarding this policy, contact faculty at the MSHS PA Program for direction.

Clinical Rotation Guidelines Continued:

4. Students are required to be available during a given rotation for a minimum of eight hours per day and at least forty hours per week. Students should not leave at the end of the day until released by the preceptor. Students are required to take call as specified by the clinical preceptor. Students may be required to participate in overnight and/or weekend call depending on the clinical site.

5. Students must attend Grand Rounds, patient rounds and case conferences when applicable to maximize learning opportunities as directed by the clinical preceptor or rotation coordinator.

6. General Guidelines for Surgical rotations: The culture of surgical education has developed such that very long hours are put in each day by the very dedicated members of a surgical team. While the Program does not provide a strict limitation of hours for students when on rotations, it is suggested that a student work no more than 70 hours per week. However, it is up to the individual student to determine if he/she wishes to spend additional hours on the rotation. This guideline is meant to be beneficial to the student's education as it allows the student to work out his/her individual schedule with the team and allows a student to stay late by personal choice. The Program feels that by imposing a specific work limit, it may impede learning and impose a barrier between the student and the team.

7. Students are required to return to the Program for one day at the end of each clinical rotation for Rotation Meetings (see schedule). Additional required callback days may be scheduled throughout the clinical year. During this time, students will take a rotation specific examination, participate in Grand Rounds presentations, perform practical examinations, attend lectures, etc. **Attendance at all rotation meetings is mandatory. Failure to comply with this requirement: If a student has an unexcused absence from an end of rotation meeting, it may be determined that the student has failed to complete all the required components of the rotation, and therefore failed the rotation and must repeat it at the end of the clinical year. An excused absence may result in a loss of 5 points from the overall grade for the rotation. All cases of a failure to attend end of rotation meetings will be evaluated by the Program Director and Director of Clinical Education to determine the outcome of the student's failure to meet this requirement.** If this subsequent loss of points results in a failure of the rotation, the rotation must be made up as outlined below. Students should expect to spend the full day at the Program for the meetings and no travel plans should be made prior to 7:00 pm on those days.

8. As part of the Master of Science in Health Sciences for Physician Assistant Degree, students will participate in PAS 8000 Research Methodology and Application. This course will take place throughout the clinical year. Students are required to complete all components of PAS 8000 as indicated by the Course Syllabus in order to be eligible for the certificate of completion and the MSHS degree. Specific guidelines regarding the PAS 8000 assignments during the clinical year are outlined below and in the course syllabus.

9. To facilitate communication, students are required to carry their tagged mobile telephones and answer calls and texts in a timely manner. Written information and e-mail messages to students' Program issued WCMC e-mail accounts (@med.cornell.edu) will also be utilized. Therefore, students are advised to check both their Program e-mail accounts and the online learning management system daily.

   A student who cannot be reached on a rotation despite repeated attempts to be contacted will be considered absent from the rotation and the attendance policy above will apply.

Clinical Rotation Guidelines Continued:

10. In the event that a student experiences any difficulty during a clinical rotation, he/she is advised to contact the PA Program **immediately**. The student may be given suggestions to manage the problem on their own or if necessary, a faculty member will intervene. It is the student's responsibility to notify the Program of the outcome whether or not resolution is achieved between the student and preceptor.

11. All puncture wounds and other exposures to blood and body fluids should be reported immediately to the Student Health Service and the Program Office per the *Physician Assistant Program Student Handbook.* As a brief review:
    - Students are to immediately contact Student Health Services and the Physician Assistant Program office for immediate guidance.
    - Students should inform their supervisor of the event and initiate the exposure protocol as applicable for that site.
    - Obtain patient name; fill out any required incident reports, send blood for appropriate work up (choose 'needlestick protocol' on lab sheet if available to expedite process).
    - Students are permitted to immediately leave the rotation site to obtain medical care at either Student Health Services or the NYPH Emergency Department (after hours).
    - Student Health Services will direct the care of the student and the follow up of the incident.

12. All potential exposures to contagious infectious diseases, via respiratory or any other vector, should be reported immediately to the Student Health Service and the Program Office per the *Physician Assistant Program Student Handbook.* As a brief review:
    - Students are to immediately contact Student Health Services and the Physician Assistant Program office for immediate guidance.
    - Students should inform their preceptor and initiate the exposure, quarantine and testing protocols as applicable.
    - Student Health Services will direct the care of the student and the follow up required.

13. To maximize the clinical learning experience, students must not be used to substitute for regular clinical or administrative staff while on clinical rotations nor may they be permitted to accept payment for services rendered in connection with the performance of their clinical rotation duties. Students must notify the Program office immediately should they be put in such a position or have any questions or other concerns.

    In addition, any student considering engaging in gainful employment or already doing so during the clinical rotations must make the Program Director aware of this. The appropriateness of such employment will be reviewed by the Program Director with the student and include a review of the student's personal academic history.

14. Student Responsibilities / Honor Code: In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

Clinical Rotation Guidelines Continued:

The following are examples of conduct that is not suitable for students at the MSHS PA Program and is subject to disciplinary action (including but not limited to verbal warning, written warning, probation, suspension (required leave of absence) and dismissal):

- knowingly or carelessly representing the work of others as one's own;
- lying, cheating, or falsification of records whether personal or patient-related;
- using or giving unauthorized assistance in any academic work;
- restricting the use of material used to study in a manner prejudicial to the interest of other students;
- purposely misleading or giving false information to another student;
- posting of confidential, inappropriate, unauthorized or copyrighted information (including but not limited to, photos, images, text, audio, video, or lecture materials) on the internet (including but not limited to Facebook, blogs. LinkedIn, and others);
- otherwise committing a breach of academic and/or professional integrity;
- repetitively or egregiously failing to fulfill the professional requirements and responsibilities of a clinical rotation;
- committing an act of physical abuse or violence of any kind;
- disorderly and/or obscene conduct on campus or in the hospital facility or its affiliates;
- bullying (including but not limited to verbal, physical force or the use of electronic technology) which deliberately seeks to harm or humiliate another student, faculty, lecturer, administrative staff or patient;
- obstructing, harassing or interfering with teaching, Program administration or patient care; including the use of information and communication technologies as a means of intimidation, harassment or unwarranted interruption;
- being repeatedly absent, unexcused, from a required course, rotation or end of rotation activities;
- failing to respond in a timely way to communications (phone calls, emails or other correspondence) from the administration, faculty, course leadership or their representatives;
- failing to comply with directive given by supervision authority;
  unauthorized entry to or use of Weill Cornell or hospital facilities or its affiliates;
  theft of or negligent damage to Weill Cornell or hospital property or its affiliates;
- use, possession or distribution of controlled substances on campus or in the hospital facilities or its affiliates;
- unauthorized use and/or possession of alcoholic beverages in the hospital or Weill Cornell facilities or its affiliates;
- inappropriate use of the Weill Cornell seal, logo, name, symbol, or facsimile.

A student or group of students, knowing of any situation in which a violation of any of the standards of conduct set forth above may have occurred is responsible for providing any such information in writing to the MSHS PA Program Director. Faculty is similarly required to report a violation to the MSHS PA Program Director. Each student matriculated at the MSHS PA Program shall be bound by standards of conduct described above and shall be presumed to be familiar with the above provisions.

When a student's conduct while matriculated at the MSHS PA Program is in violation of the Student Responsibilities/Honor Code or raises a question about his or her suitability to practice medicine, the

matter will be directed to the Committee on Promotion and Graduation for consideration and recommendation of corrective disciplinary action.

Any student who fails to adhere to the Student Responsibilities / Honor Code during the clinical phase of the Program will be referred to the Committee on Promotions and Graduation for evaluation.

15. Please refer to the *Weill Cornell Medicine MSHS Physician Assistant Program Student Handbook* for details of the guidelines and policies regarding professional expectations and terms of successful completion of the clinical year.

ROTATION SPECIFICS FOR 2024 - 2025

1. The rotation schedule for the 2024-2025 clinical year includes 15 four-week clinical rotations and students are required to do ten (10) Core supervised clinical practice rotations:

PAS 7010 and PAS 7020:	four-week Internal Medicine I & II Rotations
PAS 7030 and PAS 7040:	four-week Surgery I & II Rotations
PAS 7060	four-week Family Medicine/Primary Care Rotation
PAS 7070:	four-week Pediatric Rotation
PAS 7080:	four-week Women's Health Rotation
PAS 7090:	four-week Emergency Medicine Rotation
PAS 7100:	four-week Internal Medicine III
PAS 7110:	four-week Behavioral & Mental Health Rotation

The Course Directors for the above are the Director and Assistant Director of Clinical Education.

2. All core rotations are be done at established rotation sites -other locations will be at the discretion of and will be assigned by the Director of Clinical Education.

3. Students are *not* required to find or arrange *any* rotations or preceptors.

4. The sequence and scheduling of all rotations is at the discretion of the Director of Clinical Education and Assistant Director of Clinical Education. The majority of core rotations should be completed prior to the completion of the majority of elective rotations.

5. The remaining five (5) clinical rotations (PAS 8010 – PAS 8050) are Elective supervised clinical practice rotations. Students may choose from the currently available elective rotations at New York Presbyterian Hospital and/or affiliated sites. Assignments will be made in conjunction with the preceptors and will be based upon availability as well as student academic performance and professional behavior in the pre-clinical phase.

   Rotation sites may require additional documentation including but not limited to background checks, drug testing, supplemental applications, and interviews for any student desiring to participate in rotations at that institution/practice. Students must complete all paperwork and provide all documentation as requested by the deadlines indicated. Failure to do so may result in a denial of the requested rotation. Elective rotation preceptors have the right to make decisions about accepting students based upon the results of the application and/or interview.

6. External rotations encompass both sites and preceptors not currently utilized by the MSHS PA program for supervised clinical practice. Students may do a maximum of <u>one</u> external clinical rotation. The opportunity to do external clinical rotations is a privilege and is contingent upon approval from the Director of Clinical Education, Program Director, and the University Counsel's office. Students are advised that most external sites and some core sites will require a background check, immunization titers and possibly a drug screening. Students are responsible for this cost as well as all costs incurred in the course of arranging and participating in external rotations.
   - The opportunity to do International elective rotations is contingent upon approval from the Director of Clinical Education, Program Director, and the University Counsel's office. Any and all clinical rotations occurring with clinical sites and preceptors outside of the United States will **only be used for elective rotations**.

Rotation Specifics Continued:

- Students may be required to obtain appropriate immunizations (and must adhere to CDC immunization recommendations for international travel), submit additional paperwork and proof of separate travel insurance prior to the start of such rotations. Students are responsible for all costs incurred in the course of arranging and participating in international rotations. The MSHS PA Program reserves the right to mandate that a student return from an international site at any time during the rotation.

- The opportunity to do external or international rotations is a privilege and as such warrant's exemplary professionalism, attitude and academic performance. Therefore, only students who are in good academic standing and have demonstrated exemplary professionalism, attitude and academic performance will be permitted to do external or international rotations. Prior to pursuing an external elective rotation, a student must complete the *Student Request to Pursue an External Elective Rotation* form, which will be reviewed by the Program Director for appropriateness, and to determine if the student is in good academic standing and exhibits the characteristics outlined above. Once approved, the student may proceed with the process.

- Students wishing to do an external elective clinical rotation, or an international elective rotation must obtain the application package online in the learning management system. Students are responsible for following all directions and ensuring all documents are completed and returned to the Program office by the indicated deadlines.

- Applications for external rotations will be reviewed for approval once all components of the application are submitted. All requests and necessary paperwork for external rotations must be submitted to the Director of Clinical Education **no less than six months prior to the start of the requested rotation date.**

- All external elective rotations must be completely established and confirmed **no less than 30 business days** prior to the start of the rotation. In the event confirmation cannot be obtained, the student will be re-assigned to another clinical rotation and site.

- The Program Director or the Director of Clinical Education have the right to re-assign students to another clinical rotation site or location if necessary.

7. Physician Assistant students are responsible for their own transportation costs to and from all clinical rotation sites including core, elective, external and international rotations. See Appendix B for specific transportation reimbursement request guidelines and procedure. The final determination of eligibility for reimbursement for transportation costs is at the sole discretion of the Director of Clinical Education and the Program Director.

8. Students must comply with all health requirements of each clinical site including drug screening where required. Students must be prepared to provide evidence of such compliance directly to the clinical site if requested. Students are advised to work with the Office of Student Health as the PA Program does not have access to student medical records. Students are required to update all health information with Student Health Services prior to the start of the clinical year.

Rotation Specifics Continued:

9. Students must participate in all HIPAA training required by both Weill Cornell Medical College and Graduate School and each clinical site. Students are expected to comply with all HIPAA guidelines. Failure to comply with HIPAA guidelines may result in dismissal from the Program.

10. Students are not permitted to take photos/videos of patients. Students may not use their personal cell phones or cameras for this purpose. In the event that a student has taken a photo as directed by the attending physician, these photos may only be shared with the members of the team. No photo may ever be posted or disseminated via a social network, website, e-mail or used in a publication.

11. Students are reminded that all patient information is protected under HIPAA. Violation of this policy may result in the imposition of fines and sanctions and/or dismissal from the Program.

12. Students are advised to minimize the use of cell phones on rotations. Students should not use their cell phones in patient care areas (including nurses' stations).

13. Students must participate in and successfully complete BLS, ACLS, Infection Control, Child Abuse Reporting; Cornell required patient safety classes, evaluative examinations, EXXAT/Prism evaluations, on-line learning modules and discussion groups and other in-service training or course specific activities as directed by the Program.

14. Students must participate in additional training classes as required by Weill Cornell Medical College and each clinical site. Students must comply with these requests. Failure to do so will result in removal from the rotation and necessitate the student repeat the rotation at the conclusion of the clinical year.

15. Cornell University provides general liability insurance for all students while they are acting with the scope of their duties in an academic program of approved medical instruction. Coverage afforded by the University's professional liability policy covers students for approved on-site and off-site locations. Off-site (external) locations must be approved by the Director of Clinical Education in conjunction with the University Counsel's office prior to the commencement of the rotation. Any incident, either actual or alleged should be reported immediately to the PA Program office.

STUDENT HOLIDAY CALENDAR 2024-2025

President's Day Holiday	Feb 19, 2024
Memorial Day Holiday/	
Summer Recess	May 20-27, 2024
Juneteenth Observed	June 19, 2024
Independence Day Holiday	July 4, 2024
Labor Day Holiday	Sept 2, 2024
Fall Recess	Sept 16 – 20, 2024
Thanksgiving Holiday	Nov 28 & 29, 2024
Winter Recess	Dec 23, 2024 – Jan 3, 2025
Martin Luther King, Day	Jan 20, 2025
President's Day Holiday	Feb 17, 2025

Students are not permitted to miss the day prior to a scheduled holiday or vacation or the day following a holiday or vacation. Students are expected to be at their rotations until released by the preceptor. Students should not assume that a Holiday will include a concurrent weekend and must discuss the expectations with the preceptor prior to making any travel arrangements.

CLINICAL SCHEDULE
CLASS OF 2025

****The last day of each rotation is routinely a mandatory "Call-back" day for the students.**
*****Additional call-back days may be scheduled as needed throughout the Clinical Year**

Clinical Orientation: Jan 3 - 26, 2024

Rotation #1	January 29, 2024 – February 23, 2024
Rotation #2	February 26, 2024 – March 22, 2024
Rotation #3	March 25, 2024 – April 19, 2024
Rotation #4	April 22, 2024 – May 17, 2024

Summer Break: May 20 - 24, 2024

Rotation #5	May 28, 2024 – June 21, 2024
Rotation #6	June 24, 2024 – July 19, 2024
Rotation #7	July 22, 2024 – August 16, 2024
Rotation #8	August 19, 2024 – September 13, 2024

Fall Break: September 16 - 20, 2024

Rotation #9	September 23, 2024 – October 18, 2024
Rotation #10	October 21, 2024 – November 15, 2024
Rotation #11	November 18, 2024 – December 13, 2024

CLINICAL ACTIVITY: December 16-20, 2024

Winter Break: December 23, 2024 – January 3, 2025

Rotation #12	January 6, 2025 – January 31, 2025
Rotation #13	February 3, 2025 – February 28, 2025
Rotation #14	March 3, 2025 – March 28, 2025
Rotation #15	March 31, 2025 – April 25, 2025

Board Review & Final Clinical Activities: April 28 – May 13, 2025

GRADUATION: THURSDAY MAY 15, 2025

GRADING

The grading for all clinical rotations will be as follows:

1. During the clinical phase of the MSHS PA Program, a student must pass all components of each rotation and all additional clinical-year coursework and requirements.

2. Successful completion of ALL rotations is necessary for graduation from the MSHS Physician Assistant Program. A failing grade in a rotation will require that the student successfully repeat ALL components of that rotation. A student may not fail and repeat more than a total of two rotations during the clinical phase. A failure of a repeated rotation will be considered unsatisfactory performance and the student will be dismissed from the MSHS PA Program. Failure of a third rotation will be considered unsatisfactory overall performance and the student will be dismissed from the MSHS PA Program. A student who has been dismissed from the Program is not permitted to participate in any clinical year activities.

3. Successful completion of EACH clinical rotation is contingent upon achieving an overall passing grade of 70 and successful completion of each of the individual components of the rotation as outlined below. Should a student receive a failing grade for a given rotation, he/she must successfully repeat ALL components of that rotation after the completion of the clinical year. Students receiving a failing grade will be notified in writing and be asked to speak with the Director of Clinical Education. All cases of rotation failure will be brought before the Program Director and the Committee on Promotion and Graduation per the *Student Handbook.*

4. The preceptor evaluation will account for 45% of the overall grade for the clinical rotation.
    - The Preceptor of Record will be provided with evaluations to complete for each student.
    - At the discretion of the Preceptor of Record, students may ask that an evaluation also be sent to the preceptor with whom they spent the most time. The assigned preceptor must then be indicated on the Evaluation Form. If an evaluation is submitted by another preceptor, this evaluation will be accepted however, the final grade will remain incomplete until the original evaluation is received from the Preceptor of Record (unless the Preceptor of Record has reviewed the second submission and agrees with the evaluation, and this is communicated to the Director or Assistant Director of Clinical Education).
    - Completed evaluations may either be submitted electronically or printed and given to the students and returned to the Director of Clinical Education. Printed evaluations must be in a sealed and signed (by the preceptor) envelope at the end of the rotation meeting. Evaluations that are not submitted by the student in this manner will not be accepted.
    - Preceptor Evaluations must be received by the PA Program office no later than 30 days after the completion of a given rotation (with the exceptions of the evaluations for Rotations #14 and #15, which must be received at least 2 days prior to the Commencement Ceremony).
    - It is the students' responsibility to follow up with a preceptor who has not submitted the evaluation in a timely manner. In addition, students may request help from the Program office in obtaining the evaluation if their initial efforts are unsuccessful.
    - Students are not to request copies of their completed evaluations from their preceptor.
    - If more than one preceptor evaluation is submitted per a given rotation, the scores will be averaged together.

Grading continued:

- Students must obtain a passing score of 70 % on the preceptor evaluation or average of evaluations in order to pass the rotation.
  Students who are permanently dismissed from a rotation will receive a grade of zero (0) for the preceptor evaluation.
- Failure to achieve a passing score on the preceptor evaluation will result in a failing grade for the rotation and will necessitate that the student repeats the entire rotation after the completion of the clinical year.
- The student can contact the Director of Clinical Education for final evaluation concerns. Under no circumstances should a student approach the preceptor directly

5. Submission of the Mid-Rotation Feedback Form by the 1st Day of the 3rd week of the rotation will account for 5% of the overall grade for the clinical rotation. Content will not be graded.

6. Rotation specific exams / clinical topic papers will account for 35% of the overall grade for the clinical rotation.
   - All exams are competency-based and follow the provided objectives.
   - Passing is defined as 70% correct or greater for examinations and papers.
   - Failure to achieve a passing score will necessitate that the student remediates the failed exam material and achieve a passing score in order to pass the rotation.
   - After the completion of the End-of-Rotation Examination, the student will be notified of their initial examination grade. If a grade below 70% is recorded, The student will be followed up via email with the next steps as outlined below:
     - Remediation of a failed exam or paper must be completed within 10 days of the failed exam. Instructions for remediation will be given at the time a student is notified of the failing grade.
     - Within 72 hours of the failed EOR examination, a student will be provided with topic areas where they performed poorly on the failed examination.
       to allow for review to improve knowledge and demonstrate application of such knowledge.
     - The student will then be required to take and pass (with a grade of 70% or greater) a Remediation Examination.
       - Successful remediation of a failed examination will result in a grade of 70% for the examination component of the rotation, and an overall grade of PASS for that given clinical rotation (This is provided that the student has successfully completed the other remaining requirements for the rotation).
       - Failure to successfully remediate the examination with a score of 70% or greater will result in a failing grade for the rotation and will necessitate that the student repeats the entire rotation after the completion of the clinical year and performance review as per #3 above.
   - Persistent poor performance on the rotation examinations will be tracked by the Clinical Coordinators and students will be advised as to how they might improve their clinical performance. Students who continue to demonstrate poor performance will be advised to participate in a supplemental enrichment program as determined by the Program.
   - Students who fail two (2) rotation examinations will be strongly advised to participate in either a supplemental enrichment program and/or tutoring as determined by the Program.

- The grade generation for PAEA End-of-Rotation Examinations is outlined in Appendix E of this document.

7. A Clinical Topic Paper is required in place of the end of rotation examination for **All Elective Rotations;** it will account for 35% of the overall clinical rotation grade.
    - The specific guidelines and grading rubric for the clinical topic papers are outlined in Appendix F of this document. .
    - Papers are to be submitted via the TurnItIn website portal by 9:00 am the day the EOR examinations are given.
    - Late papers will result in a loss of 5 points from the final grade of the paper for each day late.
    - Any student who fails to achieve a score of 70% or above on the clinical topic paper will be required to submit a revised paper. Failure to achieve a score of 70% or above on the revised clinical topic paper will result in a failing grade for the rotation, will necessitate that the student repeats the entire rotation after the completion of the clinical year, and performance review as per #3 above.
        - Successful revision of a failing paper will result in a grade of 70 for the paper and an overall grade of PASS for that given clinical rotation provided the student has successfully completed the remaining requirements for the rotation.

8. Submission of one H & P and 2 SOAP notes, or other equivalent assignment as directed by the Director of Clinical Education, will account for 10% of the overall grade for the clinical rotations and must be submitted prior to the start of the EOR meeting.
    - The specific guidelines for the H & Ps are outlined below.
    - No H & Ps with the patient ID or identifying data intact will be accepted.
    - Failure to turn in the H & P and 2 SOAP NOTES by 9:00 am of the day of the end of rotation meeting will result in a grade of zero.
    - No credit will be given for late H & Ps and SOAP notes or H & Ps or SOAP notes with patient information; the grade for that rotation will remain as "Incomplete" until the H & P and SOAP notes have been submitted.
    - A student who does not exhibit a satisfactory level of effort on this assignment will not receive full credit.

9. At the discretion of the Director of Clinical Education, the submission of one case presentation will account for 10% of the overall grade for the elective clinical rotations and must be submitted prior to the start of the EOR meeting in lieu of H&P and SOAP notes for specific Elective Rotations only.
    - The specific guidelines for the case presentations are outlined below.
    - Failure to submit the case presentation prior to the end of rotation meeting will result in a grade of zero (0).
    - Case presentations with patient identifying information will not be accepted.
    - No credit will be given for late case presentation submission; the grade for that rotation will remain as "Incomplete" until the case presentation is properly posted.
    - A student who does not exhibit a satisfactory level of effort on this assignment will not receive full credit.

Grading continued:

10. Proper documentation of patient encounters and procedures via the EXXAT™/Prism Procedure Logging System will account for 5% of the overall grade for all clinical rotations and must be submitted prior to the start of the EOR meeting.
    a. The specific guidelines for reporting standards for each rotation are outlined below.
    - Failure to log their patient encounters by the time of the end of rotation meeting will result in a grade of zero (0).
    - No credit will be given for late submission; however, the grade for that rotation will remain as "Incomplete" until the information is properly submitted.

11. Completion of student feedback for every rotation is now a required component of each rotation or "course" and will need to be completed before a final grade for each rotation will be entered.

12. All "Incomplete" grades in a given rotation must be satisfied before a student will be given an overall final grade for that rotation. Satisfactory completion of all "Incomplete" grades is necessary for graduation from the MSHS Physician Assistant Program.

13. In the event that a student is assigned a Grand Rounds presentation, the grade for the presentation will replace the grade for the H&P and SOAP notes and will account for 10% of the overall grade for the core rotation during which the topic is presented.

14. Site visits will take place throughout the clinical year.
    - The specific guidelines for the site visits are outlined below.
    - The Director of Clinical Education or designated faculty may make site visits during each rotation.
    - Students on rotations at remote or elective sites may receive a phone call from the Director of Clinical Education during the rotation in lieu of an on-site meeting.
    - In the event that no site visit takes place, the student may be asked to present the required information to the Director of Clinical Education at the end of rotation meeting.
    - Failure to be prepared for the site visit per the guidelines below or to participate at the site visit when assigned will result in the loss of five (5) points from the overall grade of the clinical rotation.

15. Any student who loses points during a clinical rotation or rotation meeting due to unexcused absences, missed or incomplete assignments or dress code violations, which results in a subsequent grade of less than seventy (70), will fail the rotation. This failure to achieve a passing score will result in a failing grade for the rotation and will necessitate that the student repeats the entire rotation after the completion of the clinical year.

16. Please refer to the Student Handbook for information regarding the Summative Evaluation process.

SITE VISITS

The Director & Assistant Director of Clinical Education will be in communication throughout the clinical year with students via e-mail and/or telephone and/or text messages to monitor their progress and clinical experiences. The Directors of Clinical Education will also use these methods of communication to identify and address any issues that may arise.

In addition to the above methods of communication, the Directors of Clinical Education or designated faculty will make site visits as needed throughout the clinical year**. Physical site visits may be scheduled or unannounced.** In the event that the student cannot be located, he/she will be considered absent and in violation of the Attendance Policy (see above). At the site visit the student must be prepared to:

1. Present a full patient case of an actual patient seen during the rotation including history, physical, assessment, work-up, plan and hospital course to date. All aspects of the history must be included: cc, HPI, PMH, allergies, FH, SOC HX, and ROS.
    - A complete physical exam should also be included. Pertinent positive and negative findings are expected. Physical signs relating to the illness should be included.
    - A complete differential diagnosis is expected. There should be least three different possibilities discussed. The student must be able to explain how each relates to the particular case.
    - Discuss what lab tests were ordered on the patient. Each student must be able to explain why each test was ordered and be able to interpret all test results.
    - The student must explain the final diagnosis that was given to the patient and why.
    - What is the treatment? Students must give alternative treatments when applicable. Students must be prepared to discuss the pros and cons of the treatments and possible side effects.
    - What is the patient's prognosis?
    - The student is expected to discuss the patient and entertain questions from the site visitor and the other students present at the meeting.
    - Follow all HIPPA guidelines during the discussion.

2. Discuss the procedures he or she has done in detail.
3. Demonstrate a working knowledge of all the patients on the service as well as an in-depth knowledge of the patients assigned directly to them.
4. If requested, provide the site visitor with a copy of the completed mid-rotation evaluation.
5. Additional topics may be assigned at the beginning of each rotation for discussion.
6. Site visitors may elect to do a chart review with the student.

In the event that no physical site visit takes place, students may be asked to present this information to the Director of Clinical Education at the end of rotation meeting.

MID ROTATION FEEDBACK FORMS

Mid-rotation evaluation forms are available on-line in the learning management system (Exxat) for all students. Students **Must** print the mid-rotation evaluation and meet with their designated preceptor mid-way through the rotation to discuss their performance so that if any problems exist, they may be identified and rectified. **These completed forms must be forwarded to the Assistant Director of Clinical Education by the 1st day of the 3rd week of the rotation for review**. In the event that a student is noted to have difficulty during the clinical year, the Director of Clinical Education may REQUIRE submission of *weekly* mid-rotation evaluations to the Program.

MID ROTATION FEEDBACK FORM

Using the scale below, please evaluate the student in each category specifically in regard to the setting of internal medic
Please feel free to discuss this form with the student and make suggestions for improvement.

CATEGORY	SATISFACTORY	MARGINAL, needs improvement	UNSATISFACTORY	CATEGORY FEEDBACK
APPLIED KNOWLEDGE				
PATIENT HISTORY				
Comprehensive is detailed				
Problem-focused is specific				
PHYSICAL EXAM				
Appropriate to complete or problem-focused exam				
Proper use of equipmment				
WRITTEN RECORD				
Accurate H&P				
Focused, detailed SOAP				
PRESENTATION SKILLS				
Focused & concise				
CLINICAL REASONING				
Appropriate selection of labs & diagnostic testing				
Accurate interpretation of results				
TECHNICAL SKILLS				
Proper management of wounds and infections				
Identifies and responds to urgencies & emergencies				
Demonstrates proper procedural technique				
Provides understandable patient education				
Provides appropriate disposition instructions				
				PAGE 1 of 2
FUND OF KNOWLEDGE				
Explains pathophysiology of disease states				
Identifies most likely diagnosis				
Forms list of differentials				
Demonstrates knowledge of pharmacotherapeutics & goals of treatment				
Recognizes when to escalate concerns				
Shows evidence of independent study				
INTERPERSONAL SKILLS				
Demonstrates dynamic healthcare team interactions				
Shows patient interactions both emotionally intelligent & culturally minded				
PROFESSIONALISM				
Attitude towards learning				
Acceptance of criticism				
Adaptability to needs of patient & healthcare team				
ATTENDANCE				
# of Days Late as of above date:				
# of Days Absent as of above date:				

MSHS PA PROGRAM
Preceptor Evaluation of Clinical PA Students – Elective Rotation

Student:_____ Class of:_____ Rotation #:____ Dates: _____

PASC:_____ Specialty: _____ Rotation Site: _____

Administrative Preceptor: _____ Assigned Preceptor: _____

PRECEPTOR: Please complete the evaluation of the PA student named above by marking the single option that best describes their performance for each of the following qualities/attributes below.

If you are unable to evaluate a student for a specific item, please indicate in the appropriate comments section why you are unable to evaluate that specific item.

Be sure to use the ***PA Student Expectations Rubric*** provided in the Preceptor Handbook and review the Learning Outcomes and Instructional Objectives.

Passing =70%

Knowledge Application:			***O***=*Outstanding 5 pts* ***AA***=*Above Average 4 pts* ***A***=*Average 3 pts* ***BA***=*Below Average 2 pts* ***U***=*Unsatisfactory 1 pt*					
1.	**HISTORY**		*O*	*AA*	*A*	*BA*	*U*	
	Rate the student's ability to obtain an organized and accurate history either complete and/or problem-based relevant to the clinical presentation that utilizes an effective exchange of information from a patient (and/or proxy) that meet the needs of a diverse population including adaptability to communicate with varied age, fluency, or disability, ever mindful to cultural and emotional complexity.						

Comments regarding the student's HISTORY taking while on Internal Medicine:

Knowledge Application:			***O***=*Outstanding 5 pts* ***AA***=*Above Average 4 pts* ***A***=*Average 3 pts* ***BA***=*Below Average 2 pts* ***U***=*Unsatisfactory 1 pt*					
2.	**PHYSICAL EXAMINATION**		*O*	*AA*	*A*	*BA*	*U*	
	Rate the student's performance of a complete and/or problem-focused physical examination as indicated in the internal medicine setting using clinical skills consistent with patient-centered care throughout all aspects of evaluation to include adaptive awareness of physical limitations.							

Comments regarding the student's PHYSICAL EXAMINATION while on Internal Medicine:

Knowledge Application:			*O*=Outstanding 5 pts *AA*=Above Average 4 pts *A*=Average 3 pts *BA*=Below Average 2 pts *U*=Unsatisfactory 1 pt					
	3.	**CLINICAL REASONING**	*O*	*AA*	*A*	*BA*	*U*	
		Rate the student's rationale for selecting and interpreting laboratory, and/or diagnostic testing such as ECG based on data acquisition with attention given to the distinction between urgent, emergent, and chronic disease management and adherence to the guidelines consistent with the standard of care.						

Comments regarding student's CLINICAL REASONING while on Internal Medicine:

Knowledge Application:			*O*=Outstanding 5 pts *AA*=Above Average 4 pts *A*=Average 3 pts *BA*=Below Average 2 pts *U*=Unsatisfactory 1 pt					
	4.	**TECHNICAL SKILLS**	*O*	*AA*	*A*	*BA*	*U*	
		Rate the student's performance of therapeutic procedures commonly encountered in the setting including, but not limited to, nasogastric tube placement, venipuncture, IV catheter placement consistent with informed consent, preceptor observation, and proficiency.						

Comments regarding student's TECHNICAL SKILLS while on Internal Medicine:

Fund of Knowledge:			*O*=Outstanding 5 pts *AA*=Above Average 4 pts *A*=Average 3 pts *BA*=Below Average 2 pts *U*=Unsatisfactory 1 pt					
	5.	**PRESENTATION**	*O*	*AA*	*A*	*BA*	*U*	
		Rate the student's communication of pertinent information gathered from the patient, and/or diagnostic testing, to the preceptor that appropriately characterize the presenting complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include patient (and/or proxy) education related to disease, management, or prevention in a clear and understandable manner						

Comments regarding student's PRESENTATION skills:

Fund of Knowledge:			*O=Outstanding 5 pts* ***AA****=Above Average 4 pts* *A=Average 3 pts* ***BA****=Below Average 2 pts* *U=Unsatisfactory 1 pt*					
	6.	**DOCUMENTATION**	*O*	*AA*	*A*	*BA*	*U*	
		Rate the student's documentation of all elements of the patient encounter distinguishing acute from chronic problems using the appropriate formatting of H&P or SOAP note that correlates to the nature of the admission/visit adhering to the medical, legal, and ethical standards of care.						

Comments regarding student's DOCUMENTATION skills while on Internal Medicine:

Fund of Knowledge:			*O=Outstanding 5 pts* ***AA****=Above Average 4 pts* *A=Average 3 pts* ***BA****=Below Average 2 pts* *U=Unsatisfactory 1 pt*					
	7.	**KNOWLEDGE**	*O*	*AA*	*A*	*BA*	*U*	
		Rate the student's interpretation of clinical information that demonstrates review of the literature and comprehension of diagnosis, range of treatment options including pharmacotherapeutics, and limitations that necessitate the escalation of care in circumstances that include acute life-threatening medical, behavioral, or chronic medical problems.						

Comments regarding student's KNOWLEDGE while on Internal Medicine:

Professionalism & Collaboration:			*O*=Outstanding 5 pts **AA**=Above Average 4 pts **A**=Average 3 pts **BA**=Below Average 2 pts **U**=Unsatisfactory 1 pt					
	8.	**PROFESSIONALISM**	*O*	*AA*	*A*	*BA*	*U*	
:		Rate the student's professionalism demonstrating an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection essential to professional development.						

Comments regarding student's PROFESSIONALISM while on Internal Medicine:

Days absent: ____ Days late: ____

Please provide additional comments regarding the student's performance on rotation:
_____
_____
_____
_____
_____

Evaluator's Signature: I, _____ attest that the above represents my evaluation of the PA student's performance while on this clinical rotation.

END OF ROTATION MEETINGS

Students will return to the Program Office for rotation meetings on the last day of every clinical rotation unless otherwise specified in the Clinical Schedule or by the Director of Clinical Education. Additional required callback days may be scheduled throughout the clinical year. **Students are expected to remain at the Program or available for the entire day and no travel plans should be made prior to 7:00 pm on those days.**

1. Rotation Specific Exams
   - End of rotation examinations will be administered on-line via ExamSoft or the PAEA Surpass SecureClient delivery platform Students are required to bring an ITS-tagged computer or I-pad to all end-of-rotation meetings.
   - Students will take a rotation specific exam with 100-120 multiple choice questions at the end of rotation meeting that accounts for 35% of the overall rotation grade.
   - Examinations are based on the clinical rotation objectives provided. While it is assumed that most material in the learning objectives will be seen by the student during the rotation, this cannot be guaranteed, and students are responsible for all learning objectives.
   - All core rotations will culminate in a multiple choice examination. Doing a second rotation in an elective area or a third rotation in Internal Medicine or General Surgery will culminate in a clinical topic paper, which will be due upon completion of the rotation.
   - Any student who fails to achieve a score of 70 or above on the end of rotation exam will be required to remediate the exam per the grading guidelines outlined above.
   - Students are expected to adhere to the Examination Policy per the MSHS PA Program Handbook; the examination policy is available on the learning management system.

2. Clinical Topic Papers
   - Students participating in elective rotations per the above guidelines will submit to the Director of Clinical Education a clinical topic paper based on a topic pertinent to the elective clinical rotation at the end of rotation meeting. Submission of the paper will be made through www.turnitin.com.
   - Topics must be discussed with and approved by the Director of Clinical Education midway through the rotation and should include a case or patient discussion as part of the paper.
   - The requirements are as follows (See Appendix F for the Guidelines and Rubric):
     a. Papers must be typed, double-spaced with references and citations per the AMA format.
     b. The minimum length is five, double spaced pages (not counting cover page, references, tables, diagrams or images) with one-inch margins and a 12-point font. The bibliography must include a minimum of six current reference sources.
     c. Papers will be graded on the basis of content, clarity and the proper use of basic grammar, syntax and spelling skills. Equal emphasis will be placed on the utilization of appropriate research sources as well as the incorporation of the topic's relevance to the elective rotation experience.
     d. Clinical topic paper letter grades will be determined by letter grading system as per student handbook.
   - Clinical topic papers will account for 35% of the overall grade for the rotation.
   - Clinical Topic Papers must be submitted via TurnItIn by 9:00 am on the EOR day. Late papers will result in a loss of 5 points from the final grade of the paper for each day late.

End of Rotation meetings continued:

- Any student who fails to achieve a score of 70 or above on the clinical topic paper will be required to submit a revised paper per the grading guidelines outlined above.

3. History & Physical Case Write ups

- The student must submit a copy of a complete History and Physical including Assessment and Plan done by the student during each clinical rotations to the Director of Clinical Education at the end of rotation meeting.
- No pre-printed forms or check-off sheets will be accepted. DO NOT copy and paste from EMR systems (lab results are fine to be copy and pasted).
- Outpatient and Emergency Medicine settings will require an appropriate chart note. Brief operative notes are not acceptable.
- **All patient names must be removed from the note prior to submission to ensure confidentiality**. No credit will be given for any H & P that contains confidential patient information.
- The notes must reflect clinical competencies including the ability to:
    - Obtain and organize a comprehensive or problem-focused H&P
    - Demonstrate clinical reasoning skills to arrive at a most likely diagnosis
    - Determine a full differential list
    - Establish a comprehensive plan
    - Assemble a comprehensive or problem-focused H&P/SOAP that establishes YOUR understanding of Knowledge of Practice, Interpersonal and Communication Skills, and the use of Clinical and Technical Skills
    - Determine a differential list that demonstrates YOUR Clinical Reasoning & Problem-solving abilities
    - Establish a comprehensive care plan highlighting YOUR Interprofessional Collaboration with members of the medical team
    - Record YOUR patient encounters that reflect the highest level of Professionalism and Ethics, Practice-based Learning and Quality Improvement taking into consideration the social determinants of health
- The H & P write up will constitute 5% of the overall grade for the core clinical rotations.
- At the discretion of the Clinical Coordinators, the H&P write ups may be adjusted to address deficiencies noted in student performance.

4. Case Presentations (Assigned at the discretion of the Director of Clinical Education in lieu of H&P/SOAP note submissions for Elective Rotations). **If not specifically directed to do a case presentation, an H&P and 2 SOAP notes are expected to be turned in for every rotation.**

- During elective rotations students may be required to submit to the Director of Clinical Education one patient case encountered during the rotation by the end of the rotation.
- The chief complaint, HPI, pertinent PMH, ROS, and physical examination findings are to be included as well as the initial assessment and plan. However, all patient identifying information must be removed.

End of Rotation meetings continued:

- Students are to include the hospital course when applicable as well as describe the management of the patient.
- Students are to include a minimum of two (2) teaching points.
- Students are to include a minimum of one (1) evidence-based medicine (EBM) source that corroborates the workup, diagnosis, or management of the patient along with a brief summary of how EBM was utilized in the care of the patient.
- Case presentations will constitute 10% of the overall grade for the elective clinical rotations.

5. EXXAT™/ Prism PA Student Tracking of Patient Encounters and Procedures

- Documentation of patient encounters and procedures is mandatory and must be submitted via the EXXAT™./Prism PA Student Tracking system during each clinical rotation.
- Students will be instructed on the proper logging of information prior to the start of the clinical rotations during orientation to clinical year.
- Submissions must be completed by the end of each rotation meeting.
- The EXXAT Patient Encounters will constitute 5% of the overall grade for all clinical rotations.

6. iHuman Assignments

- All iHuman cases that are assigned need to be completed by the end of each rotation for which they are assigned.

7. Grand Rounds Presentations

- Students will work in groups of two-to-three to prepare one Grand Rounds presentation for an EOR meeting as instructed by the Director of Clinical Education.
- Assignments will be done at the beginning of the clinical year and presentations will take place during core clinical rotations. Topics must be selected from the list provided by the Director of Clinical Education.
- Topic presentations will account for 10% of the overall grade of the clinical rotation during which the topic was presented (this grade replaces the SOAP Note and H&P grades). Grand Rounds presentations should be one hour in length (with a maximum of 100 slides).
- Students will present topics for presentation and discussion to the entire class per the list available from the Director of Clinical Education. Topics will reflect the NCCPA blueprint topics for the PANCE available at www.nccpa.net.
- Students must include the following information during the presentation: brief clinical case, clinical features, epidemiology and risk factors, differential diagnosis, work-up and specific medical and surgical treatment options.
- Students are required to prepare course objectives, syllabus, content, an evaluation tool and pre- and post-presentation questions, all of which must be submitted to the Clinical Coordinator.
- Additional information regarding Grand Rounds presentations, as well as the grading rubric, will be available on-line in the learning management system.
- Students should prepare the Grand Rounds as a PowerPoint presentation with input from faculty.

End of Rotation meetings continued:

- Final topic and outline submission of the presentation must be submitted to the Director of Clinical Education/Clinical Coordinators at the end of rotation meeting two months prior to the date of the presentation.
- Rough draft submission of the presentation must be submitted to the Clinical Coordinators at the end of rotation meeting one month prior to the date of presentation. The final presentation must be submitted to the Director of Clinical Education two weeks prior to the date of presentation otherwise points may be deducted from the overall topic presentation grade.

8. <u>PAS 8000 Research Methodology and Application Course</u>

- As part of the Master of Science in Health Sciences for Physician Assistant Degree, students will participate in PAS 8000 Research Methodology and Application. This course will take place throughout the clinical year. Students are required to complete all components of PAS 8000 as indicated by the Course Syllabus in order to be eligible for the certificate of completion and the MSHS degree.
- Mandatory course lectures will take place during the end of rotation meetings.
- Per the Research Methodology and Application Course, deadlines have been established for each assignment. Failure to adhere to the required deadlines may result in an "In House" suspension at the subsequent EOR meeting.

- A student who has not met the PAS 8000 deadline may not be able to participate in activities scheduled during the EOR meeting. The student will instead be required to meet with the Senior Research Coordinator or designee during that time to complete the assignment.
- Consequently, the student will then miss the Rotation Meeting, for which the above attendance guidelines will be in effect and the student will lose five (5) points from the overall grade from the rotation.
- Students who do not complete the Research Assignment during the EOR meeting may not be allowed to start the next rotation until the assignment has been completed. Forfeited time on rotations MUST be made up and documented per the above attendance guidelines.

9. <u>OSCE Practical Experiences:</u>

- Each student will be required to participate in two (2) directed OSCE practical experiences throughout the clinical year. Assignments will be made during the clinical year. The OSCEs will take place at the Clinical Skills Center of the Weill Cornell Medical College or other designated facility and utilize standardized patients. Additional information regarding the OSCEs will be made available prior to the scheduled event.

End of Rotation meetings continued:

- **The first OSCE will routinely take place during the first half of the clinical rotations and constitute a formative evaluation.**
  - Each student must come prepared to do a focused history and physical on a standardized patient.
  - Part One:
    - The student will be given a case presentation and must obtain the proper history and physical examination from the standardized patient. The student is expected to summarize his/her findings and thoughts for the standardized patient.
  - Part Two:
    - The student will then complete a form that includes a differential diagnosis of at least three possibilities, work up and management plan.
  - The practical will be graded Pass/Fail and formative feedback provided. In the event of a failure, the student will repeat all or part of a different practical scenario at a later date to address areas of deficiency. An action plan for improvement in these areas will be developed, outlined and monitored during the subsequent rotations.

- **The final OSCE will take place during the last 4 months of the program and will constitute a portion of the summative evaluation.**
  - The above steps will remain the same with the following changes/additions:
  - The OSCE will involve a more involved patient presentation and will include two patient interactions.
  - Student will present the patient to the faculty proctor, and will write a full summary note on each patient including a formal assessment and management plan.
  - The practical will be graded. See the MSHS Physician Assistant Student Handbook for more information.

10. At the completion of each rotation, students are given the opportunity to evaluate the rotation, site and preceptors. All comments and suggestions are reviewed throughout the clinical year. Students are expected to submit evaluations on-line via EXXAT/PRISM. Although the responses will remain anonymous, completion of evaluations will be tracked.

    - All feedback is kept strictly confidential.

    - Completion of student feedback for every rotation is now a required component of each rotation or "course" and will need to be completed before a final grade for each rotation will be entered.

STUDENT EVALUATION OF ROTATION FORM

Please rate your experiences during this rotation in the following areas:

	EXCELLENT	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE	POOR
EDUCATIONAL VALUE					
Overall level of teaching					
Correlation of objectives					
Variety of patient conditions					
Case presentations					
Access to conferences					
Access to medical literature					
CLINICAL VALUE					
Hands-on patient care					
Availability of procedures					
Ability to write notes/orders					
Level of responsibility					
PRECEPTOR/STAFF					
Acceptance as member of the "team"					
Relationships with preceptors/supervisors					
Relationships with team members					
Relationships with support staff					
Professional identity as a PA student					
Preceptor supervision					
OTHER					
Orientation Procedure					
Met your expected needs					
Overall Rating for the Rotation					

Please use this space for additional comments about this rotation: _____

_____

_____

GENERAL GOALS AND OBJECTIVES FOR CLINICAL ROTATIONS

Each student is expected to participate in ten core clinical rotations and five elective rotations as outlined in the *Clinical Year Guidelines and Syllabus*. The general purpose of the clinical rotations is to provide the physician assistant student with practical clinical exposure to patients and the healthcare environment. These rotations allow the PA student to augment, strengthen and refine the knowledge and skills acquired during the pre-clinical phase of the MSHS PA Program. The student will participate as a member of the healthcare team and function under the direct supervision of attending physicians, house staff and physician assistants.

The specific objectives set forth for each core clinical rotation are available on-line in the learning management system. While it is assumed that most, if not all material in the objectives will be seen by the student during the rotation, this cannot be guaranteed, and students are responsible for all material in the learning objectives. Students should refer to the *Clinical Year Guidelines and Syllabus* for guidelines regarding the specific clinical rotation requirements and grading policies.

The ten core rotations are as follows: two clinical rotations in General Surgery, two clinical rotations in Internal Medicine, one clinical rotation in Primary Care, one clinical rotation in Pediatrics, one clinical rotation in Obstetrics and Gynecology, one clinical rotation in Emergency Medicine, one clinical rotation in Psychiatry and one clinical rotation in Geriatrics.

Elective rotations may be done in a variety of surgical and medical subspecialties or in any of the core rotations. Objectives for elective rotations are available on-line in the learning management system. It is expected that the student's knowledge will increase in core areas while on elective. Students are advised to speak to the Clinical Directors if they have questions regarding the objectives. All elective rotations require the submission of a Clinical Topic Paper.

While on clinical rotations, students are expected to participate fully as a member of the team, as such they will see patients and perform procedures. The Program utilizes the web-based EXXAT™/Prism PA Student Tracking (PAST) System to monitor student experiences. The following reflects the minimum patient encounters students are expected to log during each rotation and the minimum number of procedures students are expected to log during the entire clinical year. Students are reminded that these are the minimum numbers of patient encounters and procedures that should be performed by a PA student prior to beginning professional practice to ensure a minimum level of competency. Additional patient encounters and procedures will only enhance the student's competency and level of confidence and opportunities to gain these experiences should be sought. Students are advised to not limit themselves to the minimum numbers shown on the next page.

The minimum required procedures must be documented prior to the completion of the clinical rotations. Failure to perform and document (log) the required procedures may result in the student not being able to complete the program and graduate as originally scheduled.

The Program reserves the right to update the Guidelines and Syllabus as well as the Learning Outcomes and Instructional Objectives as needed. Students will be notified of all changes and will be given updated objectives when appropriate.

PATIENT ENCOUNTER AND PROCEDURE LOGGING REQUIREMENTS

For each and every rotation, all students must print out their completed Patient Encounter and Procedure Log Report from Exxat/Prism and obtain a preceptor signature, including date and printed name of preceptor, on the log. This signed log must be submitted to the program on the day of the end-of-rotation meeting at the Program. Failure to submit this signed log will result in the rotation being considered incomplete.

Please see Appendix C for a sample of the required Patient Encounter and Procedure Log Report.

MINIMUM EXXAT LOGGING REQUIREMENTS

Patient Encounters (per rotation type)	
Emergency Medicine	45
Surgery	45
Women's Health	45
Internal Medicine	45
Pediatrics	45
Family Medicine / Primary Care	45
Behavioral & Mental Health	45
Elective Rotations	20 for each rotation

These numbers represent the *minimum* expectations; however, students are expected to log all patient encounters.

Minimum Required Procedures (per clinical year) :
Phlebotomy: 10
IV Access: 10
Wound Care: 8
Suture Placement: 15
Arterial Blood Gas: 2-3
Splinting Upper Extremity: 5
Splinting Lower Extremity: 5
Injection: Intramuscular: 5
Injection: Intradermal: 5
Injection: Subcutaneous: 5
Staple Placement: 5
Suture/Staple Removal: 10
Electrocardiogram Interpretation: 10
Nasogastric (NG) Intubation: 2
Urethral Catheterization: Male: 2
Urethral Catheterization: Female: 2
Pelvic Examination: 3
Rectal Examination: 3
Assist in Normal Vaginal Delivery: 2
Assist in Cesarean Section: 2
Obtain Culture Specimen: Urine: 5
Obtain Culture Specimen: Blood: 5
Obtain Culture Specimen: Wound: 5
Obtain Culture Specimen: Throat: 5
Cardiopulmonary Resuscitation: observation and/or participation: 1-2

Expected Procedures (per clinical year):
Endotracheal Intubation: observation and/or participation: 1-2
Paracentesis: observation and/or participation: 1-2
Thoracentesis: observation and/or participation: 1-2
Tube Thoracostomy: observation and/or participation: 1-2
Central Venous Catheterization: observation and/or participation: 1-2
Lumbar Puncture: observation and/or participation: 1-2

*Students are strongly encouraged to log *all* surgical procedures that they participate in and may do so under the CPT codes section if not listed in the competency list.

RECEIPT FOR PROGRAM FILES cl2025

(Must be submitted by Friday 6/28/24)

I have received and take responsibility for reading the document entitled:

WEILL CORNELL MEDICINE

PHYSICIAN ASSISTANT PROGRAM

Master of Science in Health Sciences for Physician Assistants

CLINICAL YEAR GUIDELINES & SYLLABUS

2024 – 2025

Updated 6/20/2024

_____ / _____

PRINT NAME **SIGNATURE**

_____

DATE

APPENDIX A: The Weill Cornell Medical College
Disability Services

Disability *is defined by the Americans with Disabilities Act of 1990 as "a physical or mental impairment that substantially limits one or more major life activities." An individual may also qualify as disabled if he/she has had an impairment in the past or is seen as disabled based on a personal or group standard or norm. Such impairments may include physical, sensory, and cognitive or intellectual impairments. Mental disorders (also known as psychiatric or psychosocial disability) and various types of chronic disease may also be considered qualifying disabilities. A disability may occur during a person's lifetime or may be present from birth.*

The Weill Cornell Medical College's (which includes the Medical College and Graduate School of Medical Sciences) Disability Services are dedicated to providing equal educational opportunities for students with disabilities. Federal law states that no qualified student will be excluded, denied participation or subjected to discrimination from any program or activity. The Associate Dean for Student Affairs, manages all curricular, academic and student affairs-related aspects of the student's needs by working with faculty and administrators to provide services to students with disabilities in addition to assisting the school in meeting its compliance obligations.

Accommodation Requests and Review Process Guidelines

• A student must submit a written request describing the disability and/or condition and the type of accommodations being requested. The school's obligation to provide accommodations is not triggered until the disabled individual makes his or her needs known.

• A student must provide disability documentation supporting his/her need for accommodations that meets Cornell guidelines from a certified medical practitioner. Documentation must be sufficient to establish that the requested accommodation is appropriate for the student's condition. Documentation is not accepted from family members.

• A student must submit information from previously attended post-secondary institutions describing accommodations approved and used.

• A student must submit letters of approval of accommodations from testing agencies.

• The Associate Dean for Student Affairs, in conjunction with an advisory group from the school, has responsibility for determining the acceptability of documentation and reserves the right to require additional information. The school maintains the right to deny documentation that does not verify a student's disability or justify the need for reasonable accommodations. The school also maintains the option of seeking a second, professional opinion regarding documentation presented to verify disabilities. Students may appeal accommodations decisions.

• The school may request additional documentation from the student upon finding that the student's original documentation is insufficient and may choose to provide temporary accommodations while the student gathers the requested documentation.

• Once the requests have been reviewed and approved by the Associate Dean for Student Affairs and the Disability Services Advisory Committee, the Associate Dean for Student Affairs will then work with faculty and administrators to determine what accommodations are necessary.

• Documentation accepted by the Associate Dean for Student Affairs is valid as long as a student is continuously enrolled at the school. However, if there is a break in the student's enrollment, s/he may need to present updated documentation in order to receive disability services. If additional accommodations are requested, additional documentation may be needed.

• All documentation of disabilities is received and held solely by Associate Dean for Student Affairs is treated as confidential. Generally, no documentation is released to anyone outside of Associate Dean for Student Affair's office without the student's informed and written consent. Documentation is destroyed six years after the last semester the student is enrolled.

STUDENT RESPONSIBILITIES

1. A student is responsible for requesting disability special accommodations and providing supporting documentation to Associate Dean for Student Affairs at the beginning of the academic year.

2. A student is responsible for completing and submitting the Request for Accommodations form to the Associate Dean for Student Affairs with the supporting documentation.

3. The supporting documentation should
    a. be current (within the past 3 years)
    b. be in the form of a letter from a physician and/or school
    c. meet guidelines for disability (www.sds.cornell.edu/guidelines)
    d. includes medical information that describes the limitations of the disability
    e. includes evaluation/diagnostic test results used to make the diagnosis
    f. indicates the accommodation with an explanation of its relevance to the disability

4. A student is responsible for any costs or fees associated with obtaining the necessary documentation to support his/her claim.

5. Once a student has provided appropriate documentation and met with the Associate Dean for Student Affairs to discuss accommodations, he/she must schedule a time to meet with instructors to deliver an accommodation letter and discuss granted accommodations. These meetings also provide students the opportunity to introduce him/herself and discuss specific needs with the course/clerkship director and/or instructor. Meetings with instructors must take place two (2) weeks in advance of needed accommodations.

6. A student is responsible for notifying the Associate Dean for Student Affairs immediately if there are any problems receiving accommodations, or if a student feels he/she have been discriminated against or treated differently in any way.

APPENDIX B: Transportation & Travel Reimbursement Guidelines and Policies

Weill Cornell will provide limited transportation services for students commuting to affiliated hospitals. Any deviation from this policy requires special approval from the P.A. Program Director.

For transportation from off-campus housing within New York City (including Roosevelt Island housing) to the primary clinical site at WCM/NYP Hospital (including MSKCC & HSS), for travel between the hours of 11:59 pm and 4:59 am (meaning you are dismissed from rotation at 12 midnight or expected to be on-site at 5:00 am or earlier) students should utilize the Ride Health service. Please attempt to carpool with other students, and if uncertain what constitutes a reasonable expense, please get pre-approval before incurring the cost.

Regarding students that are not in Cornell Housing in Manhattan; The above policy and travel time restrictions will apply to travel to/from the main campus facilities including NYP/WCM, MSKCC and HSS. During times outside of the sited 11:59 pm to 4:59 am, travel will *not* be reimbursed.

For students travelling to the primary clinical site from off-campus housing outside of the hours of 11:59 pm to 4:59 am, reimbursement will only be paid for the cost of a standard metrocard-based public transportation trip, on a trip-by-trip basis. All such requests for reimbursement must be itemized on the request for reimbursement with the required proof of payment and receipt, as per above.

Office Preceptorships
The P.A. Program continually assesses and explores options that ensure students have safe, adequate access to public transportation. There is an expectation that students utilize the abundant public transportation options in NYC. For students assigned to a site within NYC that requires travel, reimbursement will be made for the cost of metro card charges – receipts are required and should be submitted with the appropriate information to the P.A. Program administration.

Clinical Experiences at Affiliates in the Greater NYC Area
It is expected that students will be present for all scheduled educational experiences during the rotations. Unless specifically outlined below, students should utilize the vast network of public transportation options available through NYC MTA.

New York-Presbyterian/Queens
Shuttle-Travel by Superior: A single, WCMC provided shuttle is provided leaving WCMC at 5:30 am. This shuttle is meant to service the students in the Surgery and Ob/Gyn rotations; other students may ride this shuttle only if space permits.
For students unable to secure space on one of the provided shuttles, students have two options:

1. Use public transportation – students will be reimbursed for the cost of a metro card.
2. Carpool with other students using Ride Health Service.

New York-Presbyterian/Brooklyn Methodist Hospital
Students will be reimbursed for the cost of a metro card. * Receipts are required for reimbursements

New York-Presbyterian/Lower Manhattan Hospital
Students will be reimbursed for the cost of a metro card. *Receipts are required for reimbursements.
Transportation & Travel Reimbursement Guidelines and Policies Continued:

New York Presbyterian – Westchester Division
Shuttle-Travel by Superior: A WCMC provided shuttle is provided leaving WCMC at 7:30 am. A return shuttle will depart Westchester at 5:00 pm

Extended/Weekend Clerkship Hours at Affiliates in the Greater NYC Area
We recognize that in many instances students are afforded important educational opportunities outside of normal clerkship hours (ie. Call, special educational discussions, clinical opportunities) and/or outside the hours when shuttle service is available. In order to accommodate these educational needs, students may utilize the Ride Health Service back from the affiliate. Students will need documentation from their supervising preceptor that they did participate in the activity.

- ***Metro-Card Reimbursement***
  Reimbursement for metro-car charges will only be paid for 2 trips per day maximum (round-trip) for each day of the rotation for the assigned four weeks. Receipt for funds applied to a metro-card *and* a credit card statement reflecting said charges must be submitted in order to be reimbursed.

  Reimbursement is limited to the actual amount of funds spent on travel. For example: For a 5-day per week rotation for 4 weeks (minus one day for EOR) the maximum reimbursable would be 19 days = 38 trips total (at current rate of $2.75 per trip) the maximum reimbursement would be $104.50.

- Reimbursements for rental vehicles are not routinely approved, and not for rotations in New York. Any external rotations requiring the renting of a vehicle to facilitate transportation to and from a clinical rotation site will require pre-approval by PA Program Administration and will be considered on a case-by-case basis".

- For All Reimbursement Requests, the Following Procedure Must be Followed in Order to be Reimbursed:
  - Reimbursement must be summitted BY ROTATION, within *30 days* of the completion of the rotation.
  - The *Student Request for Reimbursement Form* (Available on Exxat) must be completed electronically and submitted to the Director of Clinical Education or their Designee electronically via email. NO paper copies, scans or faxes will be accepted; must be electronic file.
  - Copies of supporting documents (credit-card statements and receipts) must be submitted to the administrative staff within the 30 days of completion of the rotation.
  - Reimbursements are processed and released directly to the student via WCM Student Accounting. Please do not ask about status of reimbursement; you will be notified when it has been disbursed.

Transportation & Travel Reimbursement Guidelines and Policies Continued:

- *Current Travel & Transportation Reimbursement Recommendations as of 01/11/2024
    - Effective as of Monday, March 28th, 2022, and subject to review and revision at any time, the policy and procedure for requesting reimbursement for transportation expenses are now:
        - Public transportation (Subway, buses, etc.) should continue to be utilized to travel to and from clinical rotations as your primary transportation method.
        - The time restriction for utilizing non-public transportation remains between the hours of **6:00 pm & 6:00 am**. This means that between the hours of 6:00 am & 6:00 pm, unless explicitly approved prior to the expense being incurred, the expectation is that public transportation will be used and not rideshare services. This is subject to change at any time.
        - Utilize the **Ride Health** service for all necessary non-public transportation to and from rotations.
        - Charges for any other rideshare or car service applications will *not* be reimbursed unless pre-approved.
    - For public transportation expenses occurred by a student:
        - Within 30 days of end or the clinical rotation, submit a request for travel reimbursement form.
            - The form MUST have on it the number of rides per method, for example: “18 days with 2 rides per day at $2.90 per ride = $104.40".
            - The submitted request MUST include proof of payment (credit card receipt) unless paid by cash (which should be indicated on receipt).
            - The submitted request MUST include a receipt with a date visible.
            - The form and required documentation should be consolidated to one PDF file.
        - The complete file should be emailed to the clinical administrator.
        - Any concerns regarding pre-approval for transportation expenses can continue to be emailed to the Director of Clinical Education.

APPENDIX C

Rotations

Student Name

Preceptor Signature
Preceptor Name
Date

Rotation 2
NY Hospital Queens: General Surgery
General Surgery (GS)

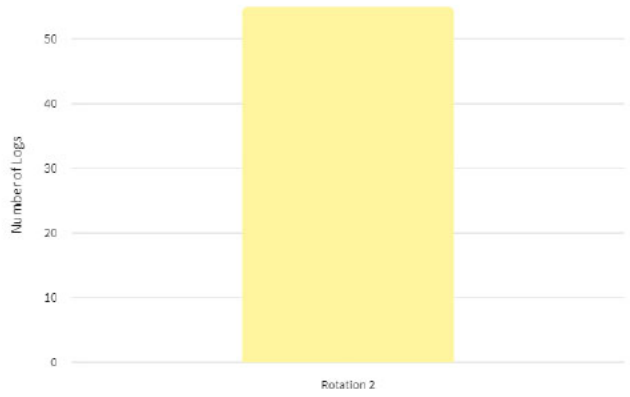
Total logs **55** | Average logs per day **3.24** | Encounter Days **17** | Logs with procedures **48**

Average Time Spent With Patients **113.18 minutes**

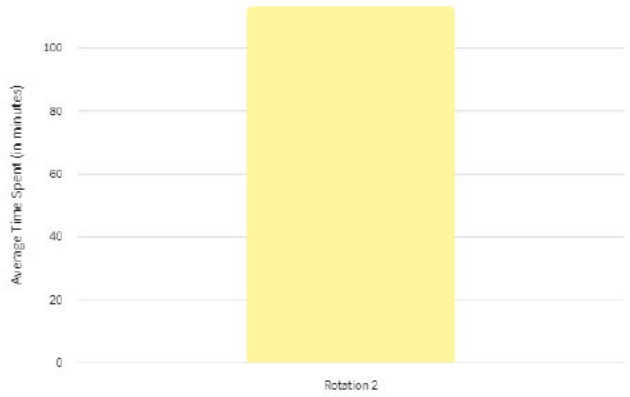
Total Encounter Time **207:55 (hh:mm)**

Time spent with Patient **103:45** | Time spent consulting with Preceptor **104:10** | Time spent consulting with Other Healthcare Professional **0**

Total Number Of Patient Log



Average Time Spent With Patients



Diagnosis

ICD 10 ↑	CUMULATIVE LOGS
M86072 Acute hematogenous osteomyelitis, left ankle and foot	1
S022XXA Fracture of nasal bones, init encntr for closed fracture	2
D234 Other benign neoplasm of skin of scalp and neck	1
T1491XA Suicide attempt, initial encounter	1
K8000 Calculus of gallbladder w acute cholecyst w/o obstruction	3
K4021 Bilateral inguinal hernia, w/o obst or gangrene, recurrent	2
V00841 Fall from standing electric scooter	1
F10239 Alcohol dependence with withdrawal, unspecified	1
I471 Supraventricular tachycardia	1
E1152 Type 2 diabetes w diabetic peripheral angiopathy w gangrene	2
C50 Malignant neoplasm of breast	2
S027 Multiple fractures involving skull and facial bones	2
D62 Acute posthemorrhagic anemia	1
K641 Second degree hemorrhoids	1
K642 Third degree hemorrhoids	1
K800 Calculus of gallbladder with acute cholecystitis	2
Z4801 Encounter for change or removal of surgical wound dressing	1
V0490XA Pedestrian on foot injured in collision w hv veh, unsp, init	1
S064X1A Epidural hemorrhage w LOC of 30 minutes or less, init	1
T847 Infect/inflm reaction due to oth int orth prosth dev/grft	1
S065 Traumatic subdural hemorrhage	1
S42001A Fracture of unsp part of right clavicle, init for clos fx	1
K432 Incisional hernia without obstruction or gangrene	1
K449 Diaphragmatic hernia without obstruction or gangrene	2
K567 Ileus, unspecified	1
K4090 Unil inguinal hernia, w/o obst or gangr, not spcf as recur	2
K810 Acute cholecystitis	5

Procedures

PROCEDURE LIST I ↑	OBSERVED	ASSISTED	PERFORMED	CUMULATIVE LOGS
Suture	-	-	19	19
Wound care - Surgical Dressing Change	-	-	1	1
EKG	1	1	1	3
Staple	-	-	1	1
Rectal Exam	-	-	3	3
Female Urinary Catheter Placement	-	-	3	3
Wound care - General Care	-	-	1	1
ABG	2	-	-	2
Chest Tube Insertion/Removal	1	1	-	2
Surgical scrubbing	-	-	37	37
Male Urinary Catheter Placement	-	-	2	2
Casting	-	-	-	0
Finger Stick	-	-	-	0
IV/ Help lock insertion	-	-	-	0
MMSE: Mandatory Questions	-	-	-	0
Obstetrics delivery - Vaginal	-	-	-	0
Pelvic Exam	-	-	-	0
Splinting	-	-	-	0
Throat Culture	-	-	-	0
Blood Culture	-	-	-	0
Central Line Placement	-	-	-	0
CPR	-	-	-	0
Intramuscular injection	-	-	-	0
Obstetrics delivery - C section	-	-	-	0

PROCEDURE LIST II ↑	OBSERVED	ASSISTED	PERFORMED	CUMULATIVE LOGS
Nasogastric tube insertion	-	2	-	2
Surgical Assist - Second Assist	1	-	26	27
Endotracheal intubation	7	-	-	7
Surgical Assist - First Assist	-	-	6	6
Thoracentesis	-	-	-	0
Lumbar puncture	-	-	-	0
Paracentesis	-	-	-	0

APPENDIX D: LEARNING OUTCOMES and INSTRUCTIONAL OBJECTIVES

PAS 7010 SUPERVISED CLINICAL PRACTICE - INTERNAL MEDICINE 1

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

Assistant Director of Clinical Education: Shari LeFauve, MS, PA-C (email: sal2037@med.cornell.edu)

Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical course is to provide the physician assistant student with practical exposure to an inpatient and/or outpatient internal medicine setting that provides care to the adult and aging population. During this rotation students will participate in the diagnosis, management, and treatment of a variety of complex acute and chronic diseases in hospitalized patients or in the outpatient setting. This supervised experience is designed to augment and strengthen the student's knowledge for clinical practice and patient-centered care while refining the skills learned in the didactic phase. The student will actively function as an integral member of the healthcare team while under the direct supervision of the attending physician or PA thus modeling professionalism, interpersonal communication, and behaviors that are key to the success of a practicing physician assistant.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES

At the conclusion of the Internal Medicine 1 supervised clinical practical experience (SCPE), the PA student must successfully demonstrate the fund of knowledge gained while on rotation by **achieving a 70% or more on the End-of-Rotation Examination** and receipt of a **satisfactory preceptor evaluation with a score of 70% or more** thus attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

1. HISTORY- Obtain an organized and accurate history either complete and/or problem-based relevant to the clinical presentation that utilizes an effective exchange of information from a patient (and/or proxy) that meet the needs of a diverse population including adaptability to communicate with varied age, fluency, or disability, ever mindful to cultural and emotional complexity. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

2. PHYSICAL EXAMINATION - Perform a complete and/or problem-focused physical examination as indicated in the internal medicine setting using clinical skills consistent with patient-centered care throughout all aspects of evaluation to include adaptive awareness of physical limitations. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

3. CLINICAL REASONING - Provide a rationale for selecting and interpreting laboratory, and/or diagnostic testing such as ECG based on data acquisition with attention given to the distinction between urgent, emergent, and chronic disease management and adherence to the guidelines consistent with the standard of care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

4. TECHNICAL SKILLS - Perform therapeutic procedures commonly encountered in the internal medicine setting including, but not limited to, nasogastric tube placement, venipuncture, IV catheter placement consistent with informed consent, preceptor observation, and proficiency. ***[Preceptor Evaluation: 4]*** **(COMPETENCY: Patient-Centered Care, Problem-based Learning)**

5. PRESENTATION- Communicate pertinent information gathered from the patient, and/or diagnostic testing, to the preceptor that appropriately characterize the presenting complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include patient (and/or proxy) education related to disease, management, or prevention in a clear and understandable manner. ***[Preceptor Evaluation: 5]*** **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

6. DOCUMENTATION - Document all elements of the patient encounter distinguishing acute from chronic problems using the appropriate formatting of H&P or SOAP note that correlates to the nature of the admission/visit adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

7. KNOWLEDGE – Interpret clinical information that demonstrates review of the literature and comprehension of diagnosis, range of treatment options including pharmacotherapeutics, and limitations that necessitate the escalation of care in circumstances that include acute life-threatening medical, behavioral, or chronic medical problems. ***[Preceptor Evaluation: 7]*** **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

8. PROFESSIONALISM – Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection essential to professional development. ***[Preceptor Evaluation: 8]*** **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION

Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides the rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	**SUCCESSFUL COMPLETION**	
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (100) MC questions	

END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	Threshold met of Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the internal medicine rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection and ongoing improvement to adequately demonstrate the following:

Knowledge for Practice & Practice-Based Learning

Throughout rotation, students must review the Internal Medicine list of diagnoses that are encountered in this practice setting. PA students are expected to strengthen didactic-phase learning and be able to apply their knowledge to each of the following:

1. Clinical presentations: Summarize the natural history, and prognosis of diseases commonly encountered in internal medicine including, but not limited to:
    i. Cardiovascular
        a. Angina
        b. Acute myocardial infarction
        c. Aortic aneurysm
        d. Arrhythmia
        e. Atherosclerosis
        f. Cardiogenic shock
        g. Cardiomyopathy
        h. Congestive heart failure
        i. Coronary artery disease
        j. Deep vein thrombosis
        k. Endocarditis
        l. Heart failure
        m. Hyperlipidemia
        n. Hypertension
        o. Myocarditis

p. Pericarditis
q. Peripheral vascular disease
r. Rheumatic fever
s. Rheumatic heart disease
t. Valvular heart disease
u. Vascular disease

ii. Critical Care
a. Acute abdomen
b. Acute adrenal insufficiency
c. Acute gastrointestinal bleed
d. Acute glaucoma
e. Acute respiratory distress/failure
f. Angina pectoris
g. Cardiac arrest
h. Cardiac arrhythmias/blocks
i. Cardiac failure
j. Diabetic ketoacidosis and acute hypoglycemia
k. Hypertensive crisis
l. Pericardial effusion
m. Pneumothorax
n. Pulmonary embolism
o. Seizures
p. Shock
q. Status epilepticus
r. Thyroid storm

iii. Endocrinology
a. Acromegaly
b. Addison's disease
c. Cushing disease
d. Diabetes insipidus
e. Diabetes mellitus (type 1 and type 2)
f. Hypercalcemia and hypocalcemia
g. Hyperlipidemia
h. Hypernatremia and hyponatremia
i. Hyperparathyroidism and hypoparathyroidism
j. Hyperthyroidism and hypothyroidism
k. Paget's disease
l. Pheochromocytoma
m. Pituitary adenoma
n. Thyroid cancer

iv. Gastroenterology
a. Acid reflux
b. Anal fissure/fistula
c. Cancer (colon, rectal, esophagus, hepatic, stomach)
d. Celiac disease
e. Cholecystitis
f. Cholelithiasis
g. Cirrhosis
h. Diverticular disease
i. Esophageal strictures
j. Esophageal varices

k. Esophagitis
l. Gastritis
m. Gastroenteritis
n. Hepatitis (acute and chronic)
o. Inflammatory bowel disease (Crohn's disease, Ulcerative colitis)
p. Irritable bowel syndrome
q. Mallory-Weiss tear
r. Pancreatitis (acute and chronic)
s. Peptic ulcer disease

v. Hematology
a. Acute and chronic leukemias
b. Anemia of chronic disease
c. Clotting factor disorders
d. G6PD deficiency
e. Hypercoagulable state
f. Idiopathic thrombocytopenic purpura
g. Iron deficiency anemia
h. Lymphomas
i. Multiple myeloma
j. Sickle cell anemia
k. Thalassemia(s)
l. Thrombotic thrombocytopenic purpura
m. Vitamin B12 and folic acid deficiency anemias

vi. Infectious Disease
a. Botulism
b. Candidiasis
c. Chlamydia
d. Cholera
e. Cryptococcus
f. Cytomegalovirus
g. Diphtheria
h. Epstein-Barr virus
i. Gonococcal infections
j. Herpes simplex
k. Histoplasmosis
l. Human Immunodeficiency Virus/AIDS
m. Influenza
n. Lyme disease
o. Mononucleosis
p. Parasitic infection
q. Pertussis
r. Pneumocystis
s. Rabies
t. Rocky Mountain spotted fever
u. SARS-CoV2
v. Salmonellosis
w. Shigellosis
x. Syphilis
y. Tetanus
z. Toxoplasmosis
aa. Tuberculosis

bb. Varicella zoster

viii. Musculoskeletal/Orthopedics/Rheumatology
- a. Fibromyalgia
- b. Gout/Pseudogout
- c. Polyarteritis nodosa
- d. Polymyalgia rheumatica
- e. Polymyositis
- f. Reactive arthritis
- g. Rheumatoid arthritis
- h. Sjogren syndrome
- i. Systemic lupus erythematosus
- j. Systemic sclerosis (scleroderma)

ix. Neurology/Psychiatry
- a. Bell palsy
- b. Cerebral aneurysm
- c. Cerebral vascular accident
- d. Cluster headaches
- e. Coma
- f. Complex regional pain syndrome
- g. Drug and alcohol use disorder
- h. Delirium
- i. Dementia
- j. Encephalitis
- k. Essential tremor
- l. Giant cell arteritis
- m. Guillain-Barre syndrome
- n. Meningitis
- o. Migraine headache
- p. Multiple sclerosis
- q. Myasthenia gravis
- r. Parkinson's disease
- s. Peripheral neuropathies
- t. Seizure disorders
- u. Syncope
- v. Tension headaches
- w. Transient ischemic attacks

x. Pulmonary
- a. Acute/chronic bronchitis
- b. Asthma
- c. Bronchiectasis
- d. Carcinoid tumor
- e. Chronic obstructive pulmonary disease
- f. Idiopathic pulmonary fibrosis
- g. Pneumoconiosis
- h. Pneumonia (viral bacterial, fungal, HIV related)
- i. Pulmonary hypertension
- j. Sarcoidosis
- k. Solitary pulmonary nodule

xi. Urology/Renal
- a. Acid/Base disturbances
- b. Acute and chronic renal failure

c. Acute interstitial nephritis
d. Benign prostatic hyperplasia
e. Cancer-prostate, bladder, renal cell testicular
f. Epididymitis
g. Erectile dysfunction
h. Glomerulonephritis
i. Hydrocele
j. Hydronephrosis
k. Hypervolemia and hypovolemia
l. Nephritic syndrome
m. Nephritis
n. Polycystic kidney disease
o. Prostatitis
p. Pyelonephritis
q. Renal Calculi
r. Renal vascular disease
s. Testicular torsion
t. Urinary tract infection
u. Varicocele

2. Scientific Concepts: Explain the anatomy, physiology, pathophysiology, biochemistry, microbiology, genetic, and molecular mechanisms of health versus disease. Be familiar with credible resources to refine core knowledge thus maintaining the highest quality standard of care of health promotion and disease prevention.

3. History Taking: Gather a problem-focused or comprehensive history depending on the situation maintaining professionalism, compassion, and the capacity of the patient.
    i. Identify preferred pronouns, gender identity
    ii. Communicate effectively with the patient, and/or to ensure an effective exchange of information that is comprehensive and inclusive.
    iii. Establish the attributes of the problem noting the location, mechanism, onset, pain, provocation, palliation, quality, radiation, severity, and treatment response.
    iv. Elicit comprehensive past medical history noting date of diagnosis, recent intervention, and current status, note genetic predisposition to disease
    v. Gather surgical history, date, and outcome
    vi. Obtain immunization status
    vii. Update list of medications, both prescriptive, over the counter, and/or complimentary
    viii. List all allergies, reaction, specify medication, environmental, and food
    ix. Quantify alcohol, tobacco, and/or recreational or medicinal substance
    x. Obtain social history including domestic partner, children, occupation, diet, and exercise
    xi. Gather sexual history, past sexually transmitted infections, pregnancy including current status and outcome
    xii. Perform a comprehensive or problem-specific review of symptoms to gain appropriate information to clarify active or chronic disease states

4. Physical Examination: Demonstrate awareness that indicates adaptability to meet the needs of persons with disability.
    i. Apply historic information to guide an appropriate physical examination commensurate with the presenting issue(s)

ii. Perform an appropriate physical according to the age of the patient being mindful of limitations that necessitate adaptability of exam
iii. Use instruments safely to guide a thorough examination appropriate to the presenting complaint including, but not limited to:
    1. Scale and stadiometer to gather BMI
    2. Sphygmomanometer and stethoscope for BP
    3. Pulse oximeter
    4. Thermometer
    5. Otoscope
    6. Ophthalmoscope
    7. Snellen chart
    8. Stethoscope
    9. Reflex hammer
    10. Tuning forks

5. Diagnostic Studies: Recommend a diagnostic approach or interpret diagnostic studies in order to employ the results in developing a differential diagnosis and formulating a treatment plan, including laboratory, imaging, and radiological studies.
    i. Recognize and provide rationale for ordering laboratory or diagnostic studies
    ii. Fully explain benefits and risks of testing
    iii. Provide patient education on preventive testing maintaining best practices
    iv. Be cognizant of access to care and insurance coverage impacting patient testing

6. Diagnosis: Formulate a list of differential diagnoses and assess the likelihood of diagnosis.
    i. Distinguish between acute, emergent, and chronic issues
    ii. Establish priority of issues identifying potentially life-threatening conditions
    iii. Provide clinical reasoning necessary to prioritize most likely diagnosis from alternative differentials
    iv. Be cognizant of limitations in medical knowledge, asking the preceptor for guidance to ensure the highest quality of care

7. Clinical Interventions: Propose Therapeutic procedures, treatment planning with associated counseling and education, monitoring, identifying complications.
    i. Develop a plan of intervention that is patient-centered and based on assessment, consider patient partnership in all interventions
    ii. Refer to specialty including, but not limited to:
        1. Allergy
        2. Cardiology
        3. Pulmonary
        4. Endocrinology
        5. Urology
        6. Oncology
        7. Ophthalmology
        8. Psychiatry
        9. Surgery
    iii. Referral to community resources including, but not limited to:
        1. Physical therapy
        2. Occupational therapy
        3. Registered dietician
        4. Social work

8. Clinical Therapeutics:
    i. Identify Pharmacology and pharmacotherapeutics, fluid and electrolyte management
        1. Act on laboratory testing to correct imbalances
        2. Understand mode of pharmacologic degradation and dosage adjustment necessary in renal or hepatic insufficiency
        3. Attention to drug interactions and harms reduction
    ii. Describe common complementary and alternative medical therapies and discuss their role in relation to traditional medical care.

9. Health Maintenance:
    i. Demonstrate knowledge of appropriate screening for cancer and chronic diseases including but not limited to diabetes and hypertension.
    ii. Discuss preventable diseases, communicable diseases, immunization schedules, and healthy lifestyles; impacts of stress, aging, environment, abuse and resources
    iii. Counsel patient on nutrition, exercise, weight control, stress reduction, smoking cessation, substance abuse screening and cardiovascular health and stroke prevention.
    iv. Utilize wide range of agency standards including but not limited to the American Heart Association, American College of Cardiology, the Centers for Disease Control, and Diabetic Prevention Program to maintain the highest standards of care
        1. Screen for depression and suicidality and initiate appropriate counseling
    v. Screen for domestic violence and provide community resources
    vi. Maintain scheduled immunizations to promote community health and well-being
    vii. Describe psychological reactions to disease including acute, chronic, and terminal disorders.

Person-Centered Care that includes Clinical and Technical Skills and Clinical Reasoning

In the practice of internal medicine, the PA student is expected to improve proficiency with patient-specific evaluation that considers accessibility, disability, and health equity. Students will be evaluated based on the following:

a. Develop and write admission orders for management plans that prioritize clinical interventions based on patient acuity, including the ordering and interpretation of appropriate diagnostic testing including but not limited to (with preceptor supervision)
    i. Laboratory testing
    ii. MR
    iii. Radiography
b. Demonstrate management of commonly encountered acute injuries, insect bites, wounds, or infections with preceptor supervision.
    i. Hemostasis
    ii. Stabilization
    iii. Selection of pharmacotherapeutics appropriate to the presenting complaint
c. Gather a thorough, problem-focused medical history in an unbiased and emotionally intelligent manner that adjusts according to barriers such as fluency or health literacy.
d. Present clear and concise patient presentations and discussions of cases.
    i. Classify information in a sequential manner fully describing the presenting complaint, physical exam, and clinical reasoning for selection of diagnosis and treatment plan
    ii. Become familiar with data acquisition for the following signs and symptoms:
        1. Abdominal pain
        2. Ascites

3. Anorexia
4. Aphasia
5. Arthralgia
6. Chest pain
7. Claudication
8. Cold intolerance
9. Constipation
10. Cough
11. Diarrhea
12. Dizziness
13. Dyspepsia
14. Dyspnea on exertion
15. Edema
16. Fatigue
17. Fever
18. Headache
19. Hematemesis
20. Hematuria
21. Hemoptysis
22. Jaundice
23. Low back pain
24. Nausea/vomiting
25. Orthopnea
26. Pallor
27. Paralysis
28. Polyuria
29. Seizure
30. Syncope
31. Urinary incontinence
32. Vertigo
33. Weakness
34. Weight loss

e. Perform the following common tasks and procedures, with direct preceptor supervision:
    i. Evaluation and documentation, H&P and SOAP/progress notes.
        1. Perform a thorough, problem-focused physical examination and differentiate normal from abnormal findings for all ages.
        2. Accurately document a complete or directed patient encounter specific to the age of the patient, nature of the issue and including co-morbid conditions
        3. Monitor the patient daily and write progress notes based upon the patient's subjective complaints, the student's objective findings and review of diagnostics.
        4. Discuss patient status on daily rounds.
        5. Formulate a discharge plan including treatment and appropriate follow up
        6. Summarize the patient's hospital stay in a written discharge summary
        7. Provide disposition, patient education, and necessary consultations
            a. All notes should be a reflection of professional integrity including appropriate characterization of presenting complaint, diagnosis and treatment plan
    i. Discuss intended procedure such as suturing with preceptor before attempting.

ii. Explain Procedural essentials:
    8. Understands the indications, contraindications, and complications for procedures
    9. Demonstrates proper technique for testing and procedures which may include but not limited to:
        a. Blood glucose
        b. Wound culture
        c. Venipuncture
        d. Blood gas collection
        e. EKG
        f. Lumbar puncture
        g. Arterial and central line placement
        h. Intravenous catheter placement
        i. Urinary catheter insertion
        j. Injections
        k. NG tube insertion
        l. Endotracheal intubation
        m. Cardiopulmonary resuscitation

iii. Document: Procedural documentation is complete and appropriately select diagnosis codes

iv. Apply the principles of patient and provider safety, healthcare quality, and minimizing medical errors

v. Identify and respond appropriately to urgencies and emergencies in the internal medicine setting.

vi. Recognize the need for consultation and initiate the consult.

vii. Apply the principles of nutrition in the management and /or prevention of disease in the internal medicine setting.

viii. Describe how population determinants of health impact patient outcomes including food insecurity, insurance accessibility, and community resources.

ix. Understand the work-flow unique to the outpatient and/or inpatient setting.

Interpersonal Skills, Interprofessional Collaboration, and Professionalism

In internal medicine, the PA student is expected to develop communication styles that adapt to the collection of information secondarily from a patient proxy (for example in the case of altered mental status, a patient with a developmental disabilities, or cognitive dysfunction), develop collaborative relationships with members of the medical team, and develop self-awareness of knowledge limitations consistent with life-long learning.

Students will be evaluated on the following:

a. Present a professional appearance when interacting with patients and peers.
    i. Wear clean lab coat and ID
    ii. Be sure instruments are clean to prevent communicable spread of disease
b. Perform duties with a professional attitude comprising such areas of attendance, reliability, personal comportment, and general demeanor.
c. Relate and perform professionally in the working situation with other members of the healthcare team.
    i. Understand the roles and responsibilities of all members of the healthcare team essential to the provision of optimal patient centered care
d. Ask appropriate questions and show evidence of independent study to obtain further knowledge.

x. On-going study is essential to expansion of knowledge appropriate to an effective PA
xi. Life-long learning is a tenant of the profession

e. Recognize one's limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.
f. Demonstrate an ability to accept constructive criticism and develop a pattern of self-assessment and improvement.
g. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.
h. Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.
i. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.
j. Demonstrate skills including flexibility, adaptability, open communication, referral, use of evidence-based practice to support decision-making and mutual goal-setting for patients with disabilities.
k. Appreciate the health care problems of the individual patient as well as those of the cultural community.
l. Appreciate the physical, psychiatric, social and economic distress created by the health problem and social construct.
m. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem(s).
n. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.
o. Participate fully to gain the best possible preceptor and self-directed learning experience possible.

ACADEMIC INTEGRITY

Students are expected to abide by the Weill Cornell Medicine Code of Academic Integrity.

The Clinical Year Guidelines & Syllabus identifies Student Responsibilities & Honor Code as follows:

In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Available on the Weill Cornell Medicine Library website**

Required Texts:

- Papadakis MA, McPhee SJ, Rabow MW, McQuade KR, Gandhi M (eds). *Current Medical Diagnosis and Treatment 2024*, McGraw-Hill, 2024.**
- Ferri F, *Ferri's Practical Guide Fast Facts for Patient Care*. 9th edition. Mosby, 2014.

Recommended Texts:

- Loscalzo J, Fauci A, Kasper D, Hauser S, Longo D, Jameson J. eds. *Harrison's Principles of Internal Medicine 21e.* McGraw Hill; 2022.**
- Gomella L, Haist L, Clinician's Pocket Reference, 12th ed McGraw Hill, 2022

Additional Reading: May be assigned by the Clinical Directors

PAS 7020 SUPERVISED CLINICAL PRACTICE - INTERNAL MEDICINE 2
MEDICINE & MEDICINE SPECIALTIES

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

Assistant Director of Clinical Education: Shari LeFauve, MS, PA-C (email: sal2037@med.cornell.edu)

Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical course is to provide the physician assistant student with practical exposure to an inpatient and/or outpatient internal medicine setting that provides care to the adult and aging population. During this rotation students will participate in the diagnosis, management, and treatment of a variety of complex acute and chronic diseases in hospitalized patients or in the outpatient setting. This supervised experience is designed to augment and strengthen the student's knowledge for clinical practice and patient-centered care while refining the skills learned in the didactic phase. The student will actively function as an integral member of the healthcare team while under the direct supervision of the attending physician or PA thus modeling professionalism, interpersonal communication, and behaviors that are key to the success of a practicing physician assistant.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES

At the conclusion of the Internal Medicine 2 supervised clinical practical experience (SCPE), the PA student must successfully demonstrate the fund of knowledge gained while on rotation by **achieving a 70% or more on the End-of-Rotation Examination** and receipt of a **satisfactory preceptor evaluation scoring 70% or more** thus attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

1. HISTORY- Obtain an organized and accurate history either complete or problem-based relevant to the clinical presentation that utilizes an effective exchange of information from a patient (and/or proxy) that meet the needs of a diverse population including adaptability to communicate with varied age, fluency, or disability, ever mindful to cultural and emotional complexity. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

2. PHYSICAL EXAMINATION - Perform a complete and/or problem-focused physical examination as indicated in the internal medicine setting using clinical skills consistent with

patient-centered care throughout all aspects of evaluation to include adaptive awareness of physical limitations. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

3. CLINICAL REASONING - Provide a rationale for selecting and interpreting laboratory, and/or diagnostic testing such as ECG based on data acquisition with attention given to the distinction between urgent, emergent, and chronic disease management and adherence to the guidelines consistent with the standard of care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

4. TECHNICAL SKILLS - Perform therapeutic procedures commonly encountered in the internal medicine setting including, but not limited to, nasogastric tube placement, venipuncture, IV catheter placement consistent with informed consent, preceptor observation, and proficiency. ***[Preceptor Evaluation: 4]*** **(COMPETENCY: Patient-Centered Care, Problem-based Learning)**

5. PRESENTATION- Communicate pertinent information gathered from the patient and/or diagnostic testing to the preceptor that appropriately characterize the presenting complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include patient (and/or proxy) education related to disease, management, or prevention in a clear and understandable manner. ***[Preceptor Evaluation: 5]*** **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

6. DOCUMENTATION - Document all elements of the patient encounter distinguishing acute from chronic problems using the appropriate formatting of H&P or SOAP note that correlates to the nature of the admission/visit adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

7. KNOWLEDGE – Interpret clinical information that demonstrates review of the literature and comprehension of diagnosis, range of treatment options including pharmacotherapeutics, and limitations that necessitate the escalation of care in circumstances that include acute life-threatening medical, behavioral, or chronic medical problems. ***[Preceptor Evaluation: 7]*** **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

8. PROFESSIONALISM – Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection essential to professional development. ***[Preceptor Evaluation: 8]*** **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION

Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	SUCCESSFUL COMPLETION	
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (120) MC questions	
END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	Threshold met of Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the internal medicine rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection and ongoing improvement to adequately demonstrate the following:

Knowledge for Practice & Practice-Based Learning

Throughout rotation, students must review the Internal Medicine list of diagnoses that are encountered in this practice setting. PA students are expected to strengthen didactic-phase learning and be able to apply their knowledge to each of the following:

1. Clinical presentations: Summarize the natural history, and prognosis of diseases commonly encountered in internal medicine, including but not limited to:
    i. Cardiovascular
        a. Angina
        b. Acute myocardial infarction
        c. Aortic aneurysm
        d. Arrhythmia

e. Atherosclerosis
f. Cardiogenic shock
g. Cardiomyopathy
h. Congestive heart failure
i. Coronary artery disease
j. Deep vein thrombosis
k. Endocarditis
l. Heart failure
m. Hyperlipidemia
n. Hypertension
o. Myocarditis
p. Pericarditis
q. Peripheral vascular disease
r. Rheumatic fever
s. Rheumatic heart disease
t. Valvular heart disease
u. Vascular disease

ii. Critical Care
a. Acute abdomen
b. Acute adrenal insufficiency
c. Acute gastrointestinal bleed
d. Acute glaucoma
e. Acute respiratory distress/failure
f. Angina pectoris
g. Cardiac arrest
h. Cardiac arrhythmias/blocks
i. Cardiac failure
j. Diabetic ketoacidosis and acute hypoglycemia
k. Hypertensive crisis
l. Pericardial effusion
m. Pneumothorax
n. Pulmonary embolism
o. Seizures
p. Shock
q. Status epilepticus
r. Thyroid storm

iii. Endocrinology
a. Acromegaly
b. Addison's disease
c. Cushing disease
d. Diabetes insipidus
e. Diabetes mellitus (type 1 and type 2)
f. Hypercalcemia and hypocalcemia
g. Hyperlipidemia
h. Hypernatremia and hyponatremia
i. Hyperparathyroidism and hypoparathyroidism
j. Hyperthyroidism and hypothyroidism
k. Paget's disease
l. Pheochromocytoma
m. Pituitary adenoma
n. Thyroid cancer

iv. Gastroenterology
    a. Acid reflux
    b. Anal fissure/fistula
    c. Cancer (colon, rectal, esophagus, hepatic, stomach)
    d. Celiac disease
    e. Cholecystitis
    f. Cholelithiasis
    g. Cirrhosis
    h. Diverticular disease
    i. Esophageal strictures
    j. Esophageal varices
    k. Esophagitis
    l. Gastritis
    m. Gastroenteritis
    n. Hepatitis (acute and chronic)
    o. Inflammatory bowel disease (Crohn's disease, Ulcerative colitis)
    p. Irritable bowel syndrome
    q. Mallory-Weiss tear
    r. Pancreatitis (acute and chronic)
    s. Peptic ulcer disease
v. Hematology
    a. Acute and chronic leukemias
    b. Anemia of chronic disease
    c. Clotting factor disorders
    d. G6PD deficiency
    e. Hypercoagulable state
    f. Idiopathic thrombocytopenic purpura
    g. Iron deficiency anemia
    h. Lymphomas
    i. Multiple myeloma
    j. Sickle cell anemia
    k. Thalassemia(s)
    l. Thrombotic thrombocytopenic purpura
    m. Vitamin B12 and folic acid deficiency anemias
vi. Infectious Disease
    a. Botulism
    b. Candidiasis
    c. Chlamydia
    d. Cholera
    e. Cryptococcus
    f. Cytomegalovirus
    g. Diphtheria
    h. Epstein-Barr virus
    i. Gonococcal infections
    j. Herpes simplex
    k. Histoplasmosis
    l. Human Immunodeficiency Virus/AIDS
    m. Influenza
    n. Lyme disease
    o. Mononucleosis
    p. Parasitic infection

q. Pertussis
r. Pneumocystis
s. Rabies
t. Rocky Mountain spotted fever
u. SARS-CoV2
v. Salmonellosis
w. Shigellosis
x. Syphilis
y. Tetanus
z. Toxoplasmosis
aa. Tuberculosis
bb. Varicella zoster

viii. Musculoskeletal/Orthopedics/Rheumatology
a. Fibromyalgia
b. Gout/Pseudogout
c. Polyarteritis nodosa
d. Polymyalgia rheumatica
e. Polymyositis
f. Reactive arthritis
g. Rheumatoid arthritis
h. Sjogren syndrome
i. Systemic lupus erythematosus
j. Systemic sclerosis (scleroderma)

ix. Neurology/Psychiatry
a. Bell palsy
b. Cerebral aneurysm
c. Cerebral vascular accident
d. Cluster headaches
e. Coma
f. Complex regional pain syndrome
g. Drug and alcohol use disorder
h. Delirium
i. Dementia
j. Encephalitis
k. Essential tremor
l. Giant cell arteritis
m. Guillain-Barre syndrome
n. Meningitis
o. Migraine headache
p. Multiple sclerosis
q. Myasthenia gravis
r. Parkinson's disease
s. Peripheral neuropathies
t. Seizure disorders
u. Syncope
v. Tension headaches
w. Transient ischemic attacks

x. Pulmonary
a. Acute/chronic bronchitis
b. Asthma
c. Bronchiectasis

d. Carcinoid tumor
e. Chronic obstructive pulmonary disease
f. Idiopathic pulmonary fibrosis
g. Pneumoconiosis
h. Pneumonia (viral bacterial, fungal, HIV related)
i. Pulmonary hypertension
j. Sarcoidosis
k. Solitary pulmonary nodule

xi. Urology/Renal
a. Acid/Base disturbances
b. Acute and chronic renal failure
c. Acute interstitial nephritis
d. Benign prostatic hyperplasia
e. Cancer-prostate, bladder, renal cell testicular
f. Epididymitis
g. Erectile dysfunction
h. Glomerulonephritis
i. Hydrocele
j. Hydronephrosis
k. Hypervolemia and hypovolemia
l. Nephritic syndrome
m. Nephritis
n. Polycystic kidney disease
o. Prostatitis
p. Pyelonephritis
q. Renal Calculi
r. Renal vascular disease
s. Testicular torsion
t. Urinary tract infection
u. Varicocele

2. Scientific Concepts: Explain the anatomy, physiology, pathophysiology, biochemistry, microbiology, genetic, and molecular mechanisms of health versus disease. Be familiar with credible resources to refine core knowledge thus maintaining the highest quality standard of care of health promotion and disease prevention.
3. History Taking: Gather a problem-focused or comprehensive history depending on the situation maintaining professionalism, compassion, and the capacity of the patient.
i. Identify preferred pronouns, gender identity
ii. Communicate effectively with the patient, and/or proxy to ensure an effective exchange of information that is comprehensive and inclusive.
iii. Establish the attributes of the problem noting the location, mechanism, onset, pain, provocation, palliation, quality, radiation, severity, and treatment response.
iv. Elicit comprehensive past medical history noting date of diagnosis, recent intervention, and current status, note genetic predisposition to disease
v. Gather surgical history, date, and outcome
vi. Obtain immunization status
vii. Update list of medications, both prescriptive, over the counter, and/or complimentary
viii. List all allergies, reaction, specify medication, environmental, and food
ix. Quantify alcohol, tobacco, and/or recreational or medicinal substance
x. Obtain social history including domestic partner, children, occupation, diet, and exercise

xi. Gather sexual history, past sexually transmitted infections, pregnancy including current status and outcome
xii. Perform a comprehensive or problem-specific review of symptoms to gain appropriate information to clarify active or chronic disease states

4. Physical Examination: Demonstrate awareness that indicates adaptability to meet the needs of persons with disability.
    i. Apply historic information to guide an appropriate physical examination commensurate with the presenting issue(s)
    ii. Perform an appropriate physical according to the age of the patient being mindful of limitations that necessitate adaptability of exam
    iii. Use instruments safely to guide a thorough examination appropriate to the presenting complaint including, but not limited to:
        1. Scale and stadiometer to gather BMI
        2. Sphygmomanometer and stethoscope for BP
        3. Pulse oximeter
        4. Thermometer
        5. Otoscope
        6. Ophthalmoscope
        7. Snellen chart
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        10. Tuning forks
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    i. Recognize and provide rationale for ordering laboratory or diagnostic studies
    ii. Fully explain benefits and risks of testing
    iii. Provide patient education on preventive testing maintaining best practices
    iv. Be cognizant of access to care and insurance coverage impacting patient testing
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    i. Distinguish between acute, emergent, and chronic issues
    ii. Establish priority of issues identifying potentially life-threatening conditions
    iii. Provide clinical reasoning necessary to prioritize most likely diagnosis from alternative differentials
    iv. Be cognizant of limitations in medical knowledge, asking for guidance to ensure the highest quality of care
7. Clinical Interventions: Propose Therapeutic procedures, treatment planning with associated counseling and education, monitoring, identifying complications.
    i. Develop a plan of intervention that is patient-centered and based on assessment, consider patient partnership in all interventions
    ii. Refer to specialty including but not limited to:
        1. Allergy
        2. Cardiology
        3. Pulmonary
        4. Endocrinology
        5. Urology
        6. Oncology
        7. Ophthalmology
        8. Psychiatry
        9. Surgery
    iii. Referral to community resources including but not limited to:

1. Physical therapy
2. Occupational therapy
3. Registered dietician
4. Social work

8. Clinical Therapeutics:
    i. Identify Pharmacology and pharmacotherapeutics, fluid and electrolyte management
        1. Act on laboratory testing to correct imbalances
        2. Understand mode of pharmacologic degradation and dosage adjustment necessary in renal or hepatic insufficiency
        3. Attention to drug interactions and harms reduction
    ii. Describe common complementary and alternative medical therapies and discuss their role in relation to traditional medical care.

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    i. Demonstrate knowledge of appropriate screening for cancer and chronic diseases including but not limited to diabetes and hypertension.
    ii. Discuss preventable diseases, communicable diseases, immunization schedules, and healthy lifestyles; impacts of stress, aging, environment, abuse and resources
    iii. Counsel patient on nutrition, exercise, weight control, stress reduction, smoking cessation, substance abuse screening and cardiovascular health and stroke prevention.
    iv. Utilize wide range of agency standards including but not limited to the American Heart Association, American College of Cardiology, the Centers for Disease Control, and Diabetic Prevention Program to maintain the highest standards of care
        1. Screen for depression and suicidality and initiate appropriate counseling
    v. Screen for domestic violence and provide community resources
    vi. Maintain scheduled immunizations to promote community health and well-being
    vii. Describe psychological reactions to disease including acute, chronic and terminal disorders.

Person-Centered Care that includes Clinical and Technical Skills and Clinical Reasoning

In the practice of internal medicine, the PA student is expected to improve proficiency with patient-specific evaluation that considers accessibility, disability, and health equity. Students will be evaluated based on the following:

a. Develop and write admission orders for management plans that prioritize clinical interventions based on patient acuity, including the ordering and interpretation of appropriate diagnostic testing including but not limited to (with preceptor supervision)
    i. Laboratory testing
    ii. MR
    iii. Radiography
b. Demonstrate management of commonly encountered acute injuries, insect bites, wounds, or infections with preceptor supervision.
    i. Hemostasis
    ii. Stabilization
    iii. Selection of pharmacotherapeutics appropriate to the presenting complaint
c. Gather a thorough, problem-focused medical history in an unbiased and emotionally intelligent manner that adjusts according to barriers such as fluency or health literacy.
d. Present clear and concise patient presentations and discussions of cases.
    i. Classify information in a sequential manner fully describing the presenting complaint, physical exam, and clinical reasoning for selection of diagnosis and

treatment plan

ii. Become familiar with data acquisition for the following signs and symptoms:
    1. Abdominal pain
    2. Ascites
    3. Anorexia
    4. Aphasia
    5. Arthralgia
    6. Chest pain
    7. Claudication
    8. Cold intolerance
    9. Constipation
    10. Cough
    11. Diarrhea
    12. Dizziness
    13. Dyspepsia
    14. Dyspnea on exertion
    15. Edema
    16. Fatigue
    17. Fever
    18. Headache
    19. Hematemesis
    20. Hematuria
    21. Hemoptysis
    22. Jaundice
    23. Low back pain
    24. Nausea/vomiting
    25. Orthopnea
    26. Pallor
    27. Paralysis
    28. Polyuria
    29. Seizure
    30. Syncope
    31. Urinary incontinence
    32. Vertigo
    33. Weakness
    34. Weight loss

e. Perform the following common tasks and procedures, with direct preceptor supervision:
    i. Evaluation and documentation, H&P and SOAP/progress notes.
        1. Perform a thorough, problem-focused physical examination and differentiate normal from abnormal findings for all ages.
        2. Accurately document a complete or directed patient encounter specific to the age of the patient, nature of the issue and including co-morbid conditions
        3. Monitor the patient daily and write progress notes based upon the patient's subjective complaints, the student's objective findings and review of diagnostics.
        4. Discuss patient status on daily rounds.
        5. Formulate a discharge plan including treatment and appropriate follow up
        6. Summarize the patient's hospital stay in a written discharge summary
        7. Provide disposition, patient education, and necessary consultations

a. All notes should be a reflection of professional integrity including appropriate characterization of presenting complaint, diagnosis and treatment plan

i. Discuss intended procedure such as suturing with preceptor before attempting.

ii. Explain Procedural essentials:

8. Understands the indications, contraindications, and complications for procedures
9. Demonstrates proper technique for testing and procedures which may include but not limited to:
    a. Blood glucose
    b. Wound culture
    c. Venipuncture
    d. Blood gas collection
    e. EKG
    f. Lumbar puncture
    g. Arterial and central line placement
    h. Intravenous catheter placement
    i. Urinary catheter insertion
    j. Injections
    k. NG tube insertion
    l. Endotracheal intubation
    m. Cardiopulmonary resuscitation

iii. Document: Procedural documentation is complete and appropriately select diagnosis codes

iv. Apply the principles of patient and provider safety, healthcare quality, and minimizing medical errors

v. Identify and respond appropriately to urgencies and emergencies in the internal medicine setting.

vi. Recognize the need for consultation and initiate the consult.

vii. Apply the principles of nutrition in the management and /or prevention of disease in the internal medicine setting.

viii. Describe how population determinants of health impact patient outcomes including food insecurity, insurance accessibility, and community resources.

ix. Understand the work-flow unique to the outpatient and/or inpatient setting.

Interpersonal Skills, Interprofessional Collaboration, and Professionalism

In internal medicine, the PA student is expected to develop communication styles that adapt to the collection of information secondarily from a patient proxy (for example in the case of altered mental status, a patient with a developmental disabilities, or cognitive dysfunction), develop collaborative relationships with members of the medical team, and develop self-awareness of knowledge limitations consistent with life-long learning.

Students will be evaluated on the following:

a. Present a professional appearance when interacting with patients and peers.
    i. Wear clean lab coat and ID
    ii. Be sure instruments are clean to prevent communicable spread of disease
b. Perform duties with a professional attitude comprising such areas of attendance, reliability, personal comportment, and general demeanor.
c. Relate and perform professionally in the working situation with other members of the healthcare team.
    i. Understand the roles and responsibilities of all members of the healthcare team

essential to the provision of optimal patient centered care

d. Ask appropriate questions and show evidence of independent study to obtain further knowledge.
    x. On-going study is essential to expansion of knowledge appropriate to an effective PA
    xi. Life-long learning is a tenant of the profession
e. Recognize one's limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.
f. Demonstrate an ability to accept constructive criticism and develop a pattern of self-assessment and improvement.
g. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.
h. Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.
i. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.
j. Demonstrate skills including flexibility, adaptability, open communication, referral, use of evidence-based practice to support decision-making and mutual goal-setting for patients with disabilities.
k. Appreciate the health care problems of the individual patient as well as those of the cultural community.
l. Appreciate the physical, psychiatric, social and economic distress created by the health problem and social construct.
m. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem(s).
n. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.
o. Participate fully to gain the best possible preceptor and self-directed learning experience possible.

ACADEMIC INTEGRITY

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In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Available on the Weill Cornell Medicine Library website**

Required Texts:

- Papadakis MA, McPhee SJ, Rabow MW, McQuade KR, Gandhi M (eds). *Current Medical Diagnosis and Treatment 2024*, McGraw-Hill, 2024.**
- Ferri F, *Ferri's Practical Guide Fast Facts for Patient Care*. 9th edition. Mosby, 2014.

Recommended Texts:

- Loscalzo J, Fauci A, Kasper D, Hauser S, Longo D, Jameson J. eds. *Harrison's Principles of Internal Medicine 21e.* McGraw Hill; 2022.**
- Gomella L, Haist L, Clinician's Pocket Reference, 12th ed McGraw Hill, 2022

Additional Reading: May be assigned by the Clinical Directors

PAS 7100 SUPERVISED CLINICAL PRACTICE - INTERNAL MEDICINE 3

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

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CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical course is to provide the physician assistant student with practical exposure to an inpatient and/or outpatient internal medicine setting that provides care to the aging population. During this rotation students will participate in the diagnosis, management, and treatment of a variety of complex acute and chronic diseases in hospitalized patients or in the outpatient setting. This supervised experience is designed to augment and strengthen the student's knowledge for clinical practice and patient-centered care while refining the skills learned in the didactic phase. The student will actively function as an integral member of the healthcare team while under the direct supervision of the attending physician or PA thus modeling professionalism, interpersonal communication, and behaviors that are key to the success of a practicing physician assistant.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES

At the conclusion of the Internal Medicine 3 supervised clinical practical experience (SCPE), the PA student must successfully demonstrate the fund of knowledge gained while on rotation by **achieving a 70% or more on the End-of-Rotation Examination** and receipt of a **satisfactory preceptor evaluation scoring 70% or more** thus attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

9. HISTORY- Obtain an organized and accurate history either complete or problem-based relevant to the clinical presentation that utilizes an effective exchange of information from a patient (and/or proxy) that meet the needs of an aging population including adaptability to communicate with varied impairments, ever mindful to cultural and emotional complexity. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

10. PHYSICAL EXAMINATION - Perform a complete or problem-focused physical examination as indicated in the internal medicine setting using clinical skills consistent with patient-centered care throughout all aspects of evaluation to include adaptive awareness of physical limitations. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

11. CLINICAL REASONING - Provide a rationale for selecting and interpreting laboratory, and/or diagnostic testing such as ECG based on data acquisition with attention given to the distinction between urgent, emergent, and chronic disease management and adherence to the guidelines consistent with the standard of care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

12. TECHNICAL SKILLS - Perform therapeutic procedures commonly encountered in the internal medicine setting including, but not limited to, foley catheter placement, venipuncture, IV catheter placement consistent with informed consent, preceptor observation, and proficiency. ***[Preceptor Evaluation: 4]*** **(COMPETENCY: Patient-Centered Care, Problem-based Learning)**

13. PRESENTATION- Communicate pertinent information gathered from the patient and/or diagnostic testing to the preceptor that appropriately characterize the presenting complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include patient (and/or proxy) education related to disease, management, or prevention in a clear and understandable manner. ***[Preceptor Evaluation: 5]*** **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

14. DOCUMENTATION - Document all elements of the patient encounter distinguishing acute from chronic problems using the appropriate formatting of H&P or SOAP note that correlates to the nature of the admission/visit adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

15. KNOWLEDGE – Interpret clinical information that demonstrates review of the literature and comprehension of diagnosis, range of treatment options including pharmacotherapeutics, and limitations that necessitate the escalation of care in circumstances that include acute life-threatening medical, behavioral, or chronic medical problems. ***[Preceptor Evaluation: 7]*** **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

16. PROFESSIONALISM – Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection essential to professional development. ***[Preceptor Evaluation: 8]*** **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION

Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	**SUCCESSFUL COMPLETION**	
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (100) MC questions	
END-OF-ROTATION	≥ 70% PASS	Threshold met of

PRECEPTOR EVALUATION	(8) outcome areas are evaluated	Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the internal medicine rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection and ongoing improvement to adequately demonstrate the following:

Knowledge for Practice & Practice-Based Learning
Throughout rotation, students must review the Internal Medicine list of diagnoses that are encountered in this practice setting. PA students are expected to strengthen didactic-phase learning and be able to apply their knowledge to the following:

10. Clinical presentations: Summarize the natural history, and prognosis of diseases commonly encountered in internal medicine, including, but not limited to:
    vii. Cardiovascular
        a. Angina
        b. Acute myocardial infarction
        c. Aortic aneurysm
        d. Arrhythmia (atrial fibrillation, atrial flutter, supraventricular tachycardia, ventricular arrhythmias, brady-arrhythmias)
        e. Atherosclerosis
        f. Cardiogenic shock
        g. Cardiomyopathy
        h. Congestive heart failure
        i. Coronary artery disease
        j. Deep vein thrombosis
        k. Endocarditis
        l. Heart failure
        m. Hyperlipidemia
        n. Hypertension
        o. Myocarditis

p. Pericarditis
q. Peripheral vascular disease
r. Rheumatic fever
s. Rheumatic heart disease
t. Valvular heart disease
u. Varicose veins
v. Vascular disease
w. Venous and arterial insufficiency

viii. Critical Care
a. Acute abdomen
b. Acute adrenal insufficiency
c. Acute gastrointestinal bleed
d. Acute glaucoma
e. Acute respiratory distress/failure
f. Angina pectoris
g. Cardiac arrest
h. Cardiac arrhythmias/blocks
i. Cardiac failure
j. Diabetic ketoacidosis and acute hypoglycemia
k. Hypertensive crisis
l. Pericardial effusion
m. Pneumothorax
n. Pulmonary embolism
o. Seizures
p. Shock
q. Status epilepticus
r. Thyroid storm

ix. Dermatology
a. Decubitus ulcer

x. Endocrinology
a. Acromegaly
b. Addison's disease
c. Cushing disease
d. Diabetes insipidus
e. Diabetes mellitus (type 1 and type 2)
f. Hypercalcemia and hypocalcemia
g. Hyperlipidemia
h. Hypernatremia and hyponatremia
i. Hyperparathyroidism and hypoparathyroidism
j. Hyperthyroidism and hypothyroidism
k. Paget's disease
l. Pheochromocytoma
m. Pituitary adenoma
n. Thyroid cancer

xi. Gastroenterology
a. Acid reflux
b. Anal fissure/fistula
c. Cancer (colon, rectal, esophagus, hepatic, stomach)
d. Celiac disease
e. Cholecystitis
f. Cholelithiasis

g. Cirrhosis
h. Clostridium difficile
i. Constipation
j. Diverticular disease
k. Esophageal strictures
l. Esophageal varices
m. Esophagitis
n. Fecal incontinence
o. Gastritis
p. Gastroenteritis
q. Hepatitis (acute and chronic)
r. Hiatal hernia
s. Inflammatory bowel disease (Crohn's disease, Ulcerative colitis)
t. Irritable bowel syndrome
u. Ischemic colitis
v. Mallory-Weiss tear
w. Malnutrition
x. Nonalcoholic fatty liver disease
y. Pancreatitis (acute and chronic)
z. Peptic ulcer disease

xii. Gynecology
a. Atrophic vaginitis
b. Post-menopausal bleeding
c. Ovarian and uterine cancer
d. Uterine prolapse

xiii. Hematology
a. Acute and chronic leukemias
b. Anemia of chronic disease
c. Clotting factor disorders
d. G6PD deficiency
e. Hypercoagulable state
f. Idiopathic thrombocytopenic purpura
g. Iron deficiency anemia
h. Lymphomas
i. Multiple myeloma
j. Sickle cell anemia
k. Thalassemia(s)
l. Thrombotic thrombocytopenic purpura
m. Vitamin B12 and folic acid deficiency anemias

xiv. Infectious Disease
a. Botulism
b. Candidiasis
c. Chlamydia
d. Cholera
e. Cryptococcus
f. Cytomegalovirus
g. Diphtheria
h. Epstein-Barr virus
i. Gonococcal infections
j. Herpes simplex and zoster
k. Histoplasmosis

l. Human Immunodeficiency Virus/AIDS
m. Influenza
n. Lyme disease
o. Parasitic infection
p. Pertussis
q. Pneumocystis
r. Rabies
s. Rocky Mountain spotted fever
t. Salmonellosis
u. Shigellosis
v. Syphilis
w. Tetanus
x. Toxoplasmosis
y. Tuberculosis
z. Varicella zoster

xii. Musculoskeletal/Orthopedics/Rheumatology
a. Falls/Hip Fracture
b. Fibromyalgia
c. Herniated disc
d. Gait disturbances
e. Giant cell arteritis
f. Gout/Pseudogout
g. Osteoarthritis
h. Osteopenia/osteoporosis
i. Plantar fasciitis
j. Polyarteritis nodosa
k. Polymyalgia rheumatica
l. Polymyositis
m. Reactive arthritis
n. Rheumatoid arthritis
o. Spinal stenosis
p. Sjogren syndrome
q. Systemic lupus erythematosus
r. Systemic sclerosis (scleroderma)

xiii. Neurology/Psychiatry
a. Alzheimer's disease
b. Anxiety
c. Bell palsy
d. Cerebral aneurysm
e. Cerebral vascular accident
f. Cluster headaches
g. Coma
h. Complex regional pain syndrome
i. Delirium
j. Dementia
k. Depression
l. Encephalitis
m. Essential tremor
n. Extrapyramidal disorders
o. Giant cell arteritis
p. Guillain-Barre syndrome

q. Meningitis
r. Migraine headache
s. Multiple sclerosis
t. Myasthenia gravis
u. Parkinson's disease
v. Peripheral neuropathies
w. Seizure disorders
x. Sleep disorders
y. Subarachnoid hemorrhage
z. Subdural hematoma
aa. Syncope
bb. Tardive dyskinesia
cc. Tension headaches
dd. Transient ischemic attacks
ee. Tumors

xiv. Ophthalmology/Otolaryngology
a. Cataracts
b. Glaucoma
c. Vision loss
d. Hearing loss

xv. Pulmonary
a. Acute/chronic bronchitis
b. Asthma
c. Bronchiectasis
d. Carcinoid tumor
e. Chronic obstructive pulmonary disease
f. Idiopathic pulmonary fibrosis
g. Pneumoconiosis
h. Pneumonia (viral bacterial, fungal, HIV related)
i. Pulmonary hypertension
j. Sarcoidosis
k. Solitary pulmonary nodule

xvi. Urology/Renal
a. Acid/Base disturbances
b. Acute and chronic renal failure
c. Acute interstitial nephritis
d. Benign prostatic hyperplasia
e. Cancer-prostate, bladder, renal cell testicular
f. Epididymitis
g. Erectile dysfunction
h. Glomerulonephritis
i. Hydrocele
j. Hydronephrosis
k. Hypervolemia and hypovolemia
l. Incontinence
m. Nephritic syndrome
n. Nephritis
o. Obstructive uropathies
p. Polycystic kidney disease
q. Prostatitis
r. Pyelonephritis

s. Renal Calculi
t. Renal vascular disease
u. Testicular torsion
v. Urinary tract infection
w. Varicocele

11. Scientific Concepts: Explain the anatomy, physiology, pathophysiology, biochemistry, microbiology, genetic, and molecular mechanisms of health versus disease. Be familiar with credible resources to refine core knowledge thus maintaining the highest quality standard of care of health promotion and disease prevention.
    i. Discuss the natural aging process in relation to all body systems
12. History Taking: Gather a problem-focused or comprehensive history depending on the situation maintaining professionalism, compassion, and the capacity of the patient.
    i. Identify preferred pronouns, gender identity
    ii. Communicate effectively with the patient, and/or proxy to ensure an effective exchange of information that is comprehensive and inclusive.
    iii. Establish the attributes of the problem noting the location, mechanism, onset, pain, provocation, palliation, quality, radiation, severity, and treatment response.
    iv. Elicit comprehensive past medical history noting date of diagnosis, recent intervention, and current status, note genetic predisposition to disease
    v. Gather surgical history, date, and outcome
    vi. Obtain immunization status
    vii. Update list of medications, both prescriptive, over the counter, and/or complimentary
        1. Gather a complete medication list and accurately document dose, route, frequency, indication, adherence, barriers to adherence
    viii. List all allergies, reaction, specify medication, environmental, and food
    ix. Quantify alcohol, tobacco, and/or recreational or medicinal substance
    x. Obtain social history including domestic partner, children, occupation, diet, and exercise, screen for elder abuse
    xi. Explore the issue of elder abuse and the various screening and preventative measures.
    xii. Gather sexual history, past sexually transmitted infections, pregnancy including current status and outcome
    xiii. Perform a comprehensive or problem-specific review of symptoms to gain appropriate information to clarify active or chronic disease states
    xiv. Utilize validated tools to screen for delirium, dementia and depression
13. Physical Examination: Demonstrate awareness that indicates adaptability to meet the needs of persons with disability.
    i. Apply historic information to guide an appropriate physical examination commensurate with the presenting issue(s)
    ii. Perform an appropriate physical according to the age of the patient being mindful of limitations that necessitate adaptability of exam
        1. Perform a comprehensive assessment
    iii. Use instruments safely to guide a thorough examination appropriate to the presenting complaint including, but not limited to:
        1. Scale and stadiometer to gather BMI
        2. Sphygmomanometer and stethoscope for BP
        3. Pulse oximeter
        4. Thermometer
        5. Otoscope
        6. Ophthalmoscope

7. Snellen chart
8. Stethoscope
9. Reflex hammer
10. Tuning forks

14. Diagnostic Studies: Recommend a diagnostic approach or interpret diagnostic studies and to employ the results in developing a differential diagnosis and formulating a treatment plan, including laboratory (including but not limited to CBC, chemistry, thyroid function tests, digoxin level), imaging/radiological studies (including but not limited to chest x-ray, CT scan, MRI).
    i. Recognize and provide rationale for ordering laboratory or diagnostic studies
    ii. Fully explain benefits and risks of testing
    iii. Provide patient education on preventive testing maintaining best practices
    iv. Be cognizant of access to care and insurance coverage impacting patient testing
    v. Demonstrate use of the Geriatric Depression Scale
15. Diagnosis: Formulate a list of differential diagnoses and assess the likelihood of diagnosis.
    i. Distinguish between acute, emergent, and chronic issues
    ii. Establish priority of issues identifying potentially life-threatening conditions
    iii. Provide clinical reasoning necessary to prioritize most likely diagnosis from alternative differentials
    iv. Be cognizant of limitations in medical knowledge, asking for guidance to ensure the highest quality of care
16. Clinical Interventions: Propose Therapeutic procedures, treatment planning with associated counseling and education, monitoring, identifying complications.
    i. Develop a plan of intervention that is patient-centered and based on assessment, consider patient partnership in all interventions
    ii. Refer to specialty including but not limited to:
        1. Allergy
        2. Cardiology
        3. Pulmonary
        4. Endocrinology
        5. Urology
        6. Oncology
        7. Ophthalmology
        8. Psychiatry
        9. Surgery
        10. Palliative Care
    iii. Referral to community resources including but not limited to:
        1. Physical therapy
        2. Occupational therapy
        3. Registered dietician
        4. Social work
        5. Hospice
17. Clinical Therapeutics:
    i. Identify Pharmacology and pharmacotherapeutics, fluid and electrolyte management
        1. Act on laboratory testing to correct imbalances
        2. Understand mode of pharmacologic degradation and dosage adjustment necessary in renal or hepatic insufficiency or age related physiologic changes
        3. Attention to drug interactions and harms reduction
    ii. Describe common complementary and alternative medical therapies and discuss their role in relation to traditional medical care.

iii. Discuss the impact of polypharmacy on the elderly patient and the importance of evaluation of medication dosage in the elderly patient

18. Health Maintenance:
    i. Demonstrate knowledge of appropriate screening for cancer and chronic diseases including but not limited to diabetes and hypertension.
    ii. Discuss preventable diseases, communicable diseases, immunization schedules, and healthy lifestyles; impacts of stress, aging, environment, abuse and resources
    iii. Counsel patient on nutrition, exercise, weight control, stress reduction, smoking cessation, substance abuse screening and cardiovascular health and stroke prevention.
    iv. Utilize wide range of agency standards including but not limited to the American Heart Association, American College of Cardiology, the Centers for Disease Control, and Diabetic Prevention Program to maintain the highest standards of care
        1. Screen for depression and suicidality and initiate appropriate counseling
    v. Screen for domestic violence and provide community resources
    vi. Identify the special daily needs of the elderly including: dentistry, podiatry, physical rehabilitation, speech therapy and audiology
    vii. Discuss the impact of the care of an elderly patient on the family members.

Person-Centered Care that includes Clinical and Technical Skills and Clinical Reasoning

In the practice of internal medicine, the PA student is expected to improve proficiency with patient-specific evaluation that considers accessibility, disability, and health equity. Students will be evaluated based on the following:

a. Develop and write admission orders for management plans that prioritize clinical interventions based on patient acuity, including the ordering and interpretation of appropriate diagnostic testing including but not limited to (with preceptor supervision)
    iv. Laboratory testing
    v. MR
    vi. Radiography
b. Demonstrate management of commonly encountered acute injuries, insect bites, wounds, or infections with preceptor supervision.
    iv. Selection of pharmacotherapeutics appropriate to the presenting complaint
c. Gather a thorough, problem-focused medical history in an unbiased and emotionally intelligent manner that adjusts according to barriers such as fluency or health literacy.
d. Present clear and concise patient presentations and discussions of cases.
    i. Classify information in a sequential manner fully describing the presenting complaint, physical exam, and clinical reasoning for selection of diagnosis and treatment plan
    ii. Become familiar with data acquisition for the following signs and symptoms:
        1. Altered mental status
        2. Constipation
        3. Decubitus ulcers
        4. Delirium
        5. Dementia
        6. Depression
        7. Diarrhea
        8. Dizziness
        9. Fever
        10. Gait disturbance
        11. Jaundice

12. Lower GI bleeding
13. Pain
14. Sleep disturbance
15. Syncope
16. Upper GI bleeding
17. Urinary incontinence
18. Vision loss

e. Perform the following common tasks and procedures, with direct preceptor supervision:
   i. Evaluation and documentation, H&P and SOAP/progress notes.
      1. Perform a thorough, problem-focused physical examination and differentiate normal from abnormal findings for all ages.
      2. Accurately document a complete or directed patient encounter specific to the age of the patient, nature of the issue and including co-morbid conditions
      3. Monitor the patient daily and write progress notes based upon the patient's subjective complaints, the student's objective findings and review of diagnostics.
      4. Discuss patient status on daily rounds.
      5. Formulate a discharge plan including treatment and appropriate follow up
      6. Summarize the patient's hospital stay in a written discharge summary
      7. Provide disposition, patient education, and necessary consultations
         a. All notes should be a reflection of professional integrity including appropriate characterization of presenting complaint, diagnosis and treatment plan
      8. Describe Medical Orders for Life Sustaining Treatment (MOLST)
      9. Discuss end of life care, palliative care and hospice
   xii. Discuss intended procedure such as suturing with preceptor before attempting.
   xiii. Explain Procedural essentials:
      10. Understands the indications, contraindications, and complications for procedures
      11. Demonstrates proper technique for testing and procedures which may include but not limited to:
         a. Blood glucose
         b. Wound culture
         c. Venipuncture
         d. Blood gas collection
         e. EKG
         f. Lumbar puncture
         g. Arterial and central line placement
         h. Intravenous catheter placement
         i. Urinary catheter insertion
         j. Injections
         k. NG tube insertion
         l. Endotracheal intubation
         m. Cardiopulmonary resuscitation
   xiv. Document: Procedural documentation is complete and appropriately select diagnosis codes
   xv. Apply the principles of patient and provider safety, healthcare quality, and minimizing medical errors
   xvi. Describe hazards of hospitalized elderly patients including but not limited to

falls, delirium, mobility and pressure ulcers.

xvii. Identify and respond appropriately to urgencies and emergencies unique to elderly patients including but not limited to electrolyte abnormalities, infections, surgical emergencies and cardiac conditions

xviii. Describe transitions of care plan for patients based on their needs at discharge.

xix. Recognize the need for consultation and initiate the consult.

xx. Discuss and illustrate the various End of Life issues: DNR orders, Living Wills, Health Care Proxy and the principles of terminal care management and hospice. Discuss the role of Medicaid and Medicare in the care of the elderly patient. Recognize the importance of pain management in the elderly patient.

xxi. Apply the principles of nutrition in the management and /or prevention of disease in the geriatric setting.

xxii. Describe how population determinants of health impact patient outcomes including food insecurity, insurance accessibility, and community resources.

xxiii. Understand the work-flow unique to the outpatient and/or inpatient setting.

Interpersonal Skills, Interprofessional Collaboration, and Professionalism

In internal medicine care, the PA student is expected to develop communication styles that adapt to the collection of information secondarily from a patient proxy (for example in the case of altered mental status, a patient with a developmental disabilities, or cognitive dysfunction), develop collaborative relationships with members of the medical team, and develop self-awareness of knowledge limitations consistent with life-long learning.

Students will be evaluated on the following:

b. Present a professional appearance when interacting with patients and peers.
   i. Wear clean lab coat and ID
   ii. Be sure instruments are clean to prevent communicable spread of disease

p. Perform duties with a professional attitude comprising such areas of attendance, reliability, personal comportment, and general demeanor.

q. Relate and perform professionally in the working situation with other members of the healthcare team.
   i. Understand the roles and responsibilities of all members of the healthcare team essential to the provision of optimal patient centered care

r. Ask appropriate questions and show evidence of independent study to obtain further knowledge.
   xxiv. On-going study is essential to expansion of knowledge appropriate to an effective PA
   xxv. Life-long learning is a tenant of the profession

s. Recognize one's limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.

t. Demonstrate an ability to accept constructive criticism and develop a pattern of self-assessment and improvement.

u. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.

v. Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.

w. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.

x. Demonstrate skills including flexibility, adaptability, open communication, referral, use

of evidence-based practice to support decision-making and mutual goal-setting for patients with disabilities.

y. Appreciate the health care problems of the individual patient as well as those of the cultural community.
z. Appreciate the physical, psychiatric, social and economic distress created by the health problem and social construct.
aa. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem(s).
bb. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.
cc. Participate fully to gain the best possible preceptor and self-directed learning experience possible.

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- Loscalzo J, Fauci A, Kasper D, Hauser S, Longo D, Jameson J. eds. *Harrison's Principles of Internal Medicine 21e.* McGraw Hill; 2022.**

Additional Reading: May be assigned by the Clinical Directors

PAS 7030 SUPERVISED CLINICAL PRACTICAL EXPERIENCE (SCPE) SURGERY 1

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

Assistant Director of Clinical Education: Shari LeFauve, MS, PA-C (email: sal2037@med.cornell.edu)

Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical rotation is to provide the physician assistant student with practical exposure to patients with commonly encountered surgical disorders unresolved by conservative care. It is designed to augment, strengthen, and refine the student's knowledge of practice, problem solving capabilities, technical and interpersonal communication skills, and principles of professional practice learned in the didactic phase of education. Students develop the ability to distinguish between acute, chronic, or emergent patient presentations. This rotation allows students to actively participate in all phases of surgical care, participating as an integral member of the surgical care team. Under the direct supervision of attending physicians, house staff physicians and physician assistants, the student will be responsible for performing history and physical examinations, order and interpret diagnostic labs and expedite procedures under direct supervision, to determine best practice medical and surgical care plans for patients of all ages (infant, child, adolescent, adult, and elderly patients). The student may participate as a first or second assistant or OR observer in the outpatient, ambulatory, or inpatient operating room settings if approved by the lead surgeon and rotation preceptor.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES for SURGERY

At the conclusion of the Surgery Supervised Clinical Practical Experience (SCPE), the PA student must successfully demonstrate the fund of knowledge and critical thinking necessary to align with documented rotation outcomes. This is measured by **achieving a 70% or more on the**

End-of-Rotation Examination and receiving a **satisfactory preceptor evaluation** (**of 70% or more**). These measures serve to attest to the satisfactory completion of rotation specific attributes necessary to attain program identified competencies.

1. KNOWLEDGE – In the practice of Surgery for patients across the lifespan, demonstrate and apply knowledge of the peri-operative evaluation, and management of surgical patients in the ambulatory or inpatient surgical care settings for patients presenting to receive elective or emergent surgical care. This will include knowledge of the peri-operative patient optimization through collaborative management of care across the lifespan.

[Preceptor Evaluation: 1] **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

2. CLINICAL REASONING – In the practice of Surgery through comprehensive collaborative patient evaluation in the ambulatory, or inpatient operating room settings, formulate an appropriate differential diagnosis and identify the most likely diagnosis for patients presenting for elective or emergent surgical care.

[Preceptor Evaluation: 2] **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

3. CLINICAL and TECHNICAL SKILLS - In the practice of caring for Surgery patients in the peri-operative and operating room settings under direct preceptor supervision, the student can perform the following common tasks and procedures including but not limited to pre-operative, peri-operative, intra-operative, post-operative and outpatient surgical patient care across the lifespan.

   [Preceptor Evaluation: 2, 3, 6, 7] **(Person-Centered Care)**

4. HISTORY and PHYSICAL EXAMINATION- Obtain a history and physical relevant to the practice of surgery in the pre-operative, peri-operative and post-operative settings. This documentation will utilize an effective exchange of information from patient and/or caregiver(s) to clinicians that meet the needs of the individual patient and that is respectful of diverse patient and clinician colleague populations. Student's demonstration of adaptability to communicate effectively with varied age, language fluency, abilities, verbal, hearing, or speech challenges and ever mindful of the cultural and emotional complexities witnessed in all healthcare environments.

   [Preceptor Evaluation: 4] **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

5. PRESENTATION- In the practice of Surgery, clearly communicate with patients and collaborative healthcare team members, pertinent information gathered from the patient and considering all patient specific data collected through history-taking, physical exams, laboratory, and diagnostic testing, present and effectively discuss clinical information in a concise and coherent manner.

   [Preceptor Evaluation: 6] **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

6. DOCUMENTATION - In the practice of Surgery documents all elements of the patient encounter using the appropriate formatting of H&P or SOAP note that correlates to the nature of the patient encounter adhering to the medical, legal, and ethical standards of care. Document clinical information in an accurate and concise manner and navigate the electronic health record.

   [Preceptor Evaluation: 7] **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

7. PROFESSIONALISM – Demonstrate the ability to perform as a member of a surgical care team. Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection and goal setting essential to professional development.

[Preceptor Evaluation: 8] **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

COMPONENTS OF ROTATION	SUCCESSFUL COMPLETION	COMPONENT WEIGHTS
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (100) MC questions	35%
END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	45%
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	5%
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	10%
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required	5%

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the surgery rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection, and goal setting directed toward ongoing advancement of skills to adequately demonstrate the following:

INSTRUCTIONAL OBJECTIVES FOR THE CARE OF THE SURGICAL PATIENT:

- Knowledge of Practice - In the practice of Surgery, students will apply and further develop their knowledge of most encountered clinical scenarios including, but not limited to:
    i. Abdominal distension
    ii. Abdominal pain
    iii. Anorexia
    iv. Breast mass
    v. Burns
    vi. Constipation
    vii. Dehydration
    viii. Diarrhea
    ix. Dyspepsia
    x. Dyspnea
    xi. Dysuria
    xii. Fatigue
    xiii. Fever
    xiv. Organ, joint, bone, vascular, nerve, or soft tissue pain
    xv. Hematemesis
    xvi. Hematochezia
    xvii. Hematuria
    xviii. Hypotension
    xix. Jaundice
    xx. Lymphadenopathy
    xxi. Melena
    xxii. Nausea

xxiii. Nipple discharge
xxiv. Obstipation
xxv. Pyuria
xxvi. Referred pain
xxvii. Breast, Bone, Soft Tissue, or Organ mass/pain
xxviii. Vomiting
xxix. Weight loss

b. Fluid and electrolyte related acid base problems (with emphasis on composition of fluid compartments, regulation of sodium, water and osmolarity), disorders of volume (depletion, excess), disorders of electrolyte concentration (Na, K, Ca, Mg, Cl, P), disorders of acid-base balance and fluid and electrolyte therapy
c. Shock: Hypovolemic, cardiogenic, septic, and neurogenic
d. Conditions of the Head and Neck
e. Benign lesions (lip, oral cavity and paranasal sinuses), carcinomas, connective tissue sarcomas, Kaposi's sarcoma, inflammatory conditions, infections and tumors of the salivary glands.
f. Thyroid and Parathyroid : Thyrotoxicosis, hypothyroidism, thyroiditis, goiter, benign and malignant tumors, hyperparathyroidism, parathyroid carcinoma
g. Diseases of the Breast : Common breast disorders including but not limited to inflammation and infectious disorders, gynecomastia, benign lesions, fibroadenomatous and fibrocystic disease and carcinoma of the breast.
h. Chest, Lung, and Mediastinum: Thoracic injuries, chest wall congenital deformities and tumors, pleural effusions, empyema, and spontaneous pneumothorax, congenital lung lesions, pulmonary infections, primary carcinoma of the lung and metastatic tumors, thymomas and lymphoma.
i. Esophagus, stomach and duodenum: Peptic ulcer disease (i.e. bleeding, perforation, obstruction, intractability), gastric outlet obstruction, pyloric stenosis, malignancies of the stomach, gastric ulcer and duodenal ulcer, esophageal webs, esophageal varices, Barrett's esophagus, obesity.
j. Small or large bowel disorders, colon, rectum, anus, appendix: Carcinoma of the colon, rectum and anus, anal fissures and fistulas, perianal infections, inflammatory bowel disease (Crohn's disease and ulcerative colitis), small bowel or colonic obstruction, hemorrhoids, acute appendicitis with and without perforation, acute diverticulitis, volvulus, mesenteric ischemia, direct/indirect/incarcerated hernias, adhesions, toxic

megacolon.

k. Liver, biliary system and pancreas: Portal hypertension, infections and neoplasms of the liver, gall bladder; gall bladder disease including biliary colic, cholelithiasis, cholecystitis and common bile duct disease; acute and chronic pancreatitis, neoplasms of the pancreas.
l. Diseases of the Great Vessels: Aneurysms of the aorta, traumatic thoracic aneurysms, traumatic thoracic aneurysms, non- penetrating injuries, atherosclerosis.
m. Peripheral Arterial and Venous Disease: Abdominal aortic aneurysms (AAA), cardiac emboli, arterial thrombosis, the diabetic foot, acute mesenteric ischemia, deep vein thrombosis (DVT), varicose veins, chronic venous insufficiency, and lymphedema.
n. Endocrine: Benign and malignant diseases of the adrenals, multiple endocrine neoplastic syndromes, pheochromocytoma
o. Hernias: Inguinal, sliding, ventral, and femoral
p. Miscellaneous: MRSA infections, decubital ulcers, gangrene, compartment syndrome
q. Define the basic anatomy and physiology of the skin and describe the principles of wound care associated with phases of wound healing, factors affecting wound healing, general principles of management of clean, clean- contaminated and contaminated wounds.
r. Describe the surgical management of trauma (penetrating injuries, pressure ulcers, keloids), infections (viral and bacterial), benign and malignant tumors (basal and squamous cell carcinoma, malignant melanoma).
s. Assess a patient's nutritional status; determine nutritional needs, prevention, and treatment of nutritional deficits in surgical patients with emphasis on techniques of nutritional support including enteral and parenteral routes, complications of nutritional therapy, and controversies in nutritional support of surgical patients.
t. Discuss the homeostatic process and the evaluation of potential bleeding disorders with emphasis on the causes of surgical bleeding, blood replacement therapy including the estimation of transfusion requirements as well as blood component therapy.
u. Discuss the endocrine response (classic hormonal response pattern) to infection and surgical trauma with emphasis on auto regulatory mechanisms of pituitary-adrenal axis, renal response (rennin, AHD) and altered substrate utilization during injury.
v. Discuss the pathogenesis, prevention, and management of established infections with emphasis on diagnosis and treatment of common surgical infections.
w. Assess and propose the proper intervention for suspected wound infections/cellulitis.

x. Identify the indications for conservative vs. operative management of patients presenting with common surgical problems.
y. Review and apply the appropriate preventative screening guidelines for cancers of the gastrointestinal tract and breast.
z. Review the safety hazards associated with the Operating Room suite. Define the names, uses, and handling of common surgical instruments.
aa. Identify the basic steps involved in the common surgical procedures in which they will be involved.
bb. Define the composition of various suture materials and define the common surgical stitches, ties and knots.
cc. Scientific Concepts:
    i. Pathophysiology
    ii. Anatomy/Physiology
    iii. Microbiology
    iv. Genetic and molecular mechanisms of health and disease in the practice of surgery.
    v. Epidemiology of common diseases encountered in the practice of surgery.

- History Taking and Physical Examination
- Diagnostic Studies: The student is expected to interpret diagnostic studies and to employ the results in developing a differential diagnosis and formulating a treatment plan, including laboratory, imaging, and radiological studies
- Diagnosis: Formulating differential diagnoses and assessing likelihood of diagnosis for common complaints encountered in a surgical setting including but not limited to:
- Clinical Interventions:
    a. Therapeutic procedures
    b. Treatment planning with associated counseling and education
    c. Monitoring,
    d. Identifying complications
- Clinical Therapeutics:
    a. Pharmacology and pharmacotherapeutics
    b. fluid and electrolytes
    c. Health Maintenance:
    d. Screening
    e. counseling on preventable diseases,

f. communicable diseases,
g. immunization schedules
h. healthy lifestyles; impacts of stress, aging, environment, and abuse.
i. Demonstrate and apply the comprehension of medical research and evidence-based medicine to the clinical practice of surgery.

- Clinical and Technical Skills - In the practice of surgery, the student is expected to be able to:
    a. Develop management plans that prioritize clinical interventions based on patient condition, including the ordering and interpretation of appropriate diagnostic testing.
    b. Demonstrate management of:
        i. wound care
        ii. shock
        iii. Infections
        iv. pre-operative evaluation
        v. peri-operative complications
        vi. post-operative conditions and treatment
    c. Elicit a thorough, problem-focused medical history of a patient in the surgical setting.
    d. Orally present clear and concise patient presentations and discussions of cases.
    e. In the practice of Surgery, with direct preceptor supervision, perform the following tasks and procedures:
        i. Complete a pre-operative physical examination H&P
        ii. Pre-operative documentation of problem-focused History and Physical
            1. To include interpretation of normal and abnormal findings
        iii. Gowning, gloving, and scrubbing.
        iv. Intra-operative:
            1. Sterile technique while assisting in OR
            2. Intraoperative:
                a. knot tying
                b. wound closure including suture and staple placement
        v. Documentation: Brief Operative Note
        vi. Post-Operative management, discharge planning, patient education and discharge summary documentation
            1. Wound care
            2. Staple and suture removal

vii. Apply the principles of patient safety, healthcare quality, and minimizing medical error
viii. Identify and respond appropriately to urgencies and emergencies in Surgery
ix. Apply the principles of nutrition in Surgery
x. Describe how structural determinants of health impact patient outcomes in Surgery

- Professionalism, Behaviors, and Interpersonal Skills - In the practice of surgery, the student is expected to:
    a. Present a professional appearance and attitude when interacting with patients and peers.
    b. Perform his/her duties with a professional attitude comprising such areas of attendance, reliability, accurate reporting, and personal comportment, dress code and general demeanor.
    c. Relate and perform professionally in the working situation with other members of the healthcare team.
    d. Ask appropriate questions to obtain further knowledge.
    e. Recognize his/her limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.
    f. Demonstrate an ability to accept constructive criticism and develop a pattern of self-assessment and improvement.
    g. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.
    h. Demonstrate having done independent outside reading regarding problems seen.
    i. Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.
    j. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.
    k. Appreciate the health care problems of the individual patient as well as those of the appropriate cultural groups.
    l. Appreciate the physical, psychic, social and economic distress created by the health problem.
    m. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem.

n. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.
o. Participate in surgical operations, having reviewed the proper steps of the procedure.

ACADEMIC INTEGRITY

Students are expected to abide by the Weill Cornell Graduate School Code of Academic Integrity. The Clinical Year Guidelines & Syllabus identifies Student Responsibilities & Honor Code as follows: In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Available on the Weill Cornell Medicine Library website

Schwartz's Principles of Surgery,11th edition, F. Brunicardi. McGraw Hill, 2019

Current Surgical Diagnosis and Treatment, 15th edition. Doherty. McGraw Hill, 2020

Sabiston Textbook of Surgery, 21st edition. Townsend, C. Elsevier, 2021

*Additional Reading: May be assigned by the Directors of Clinical Education

PAS 7040 SUPERVISED CLINICAL PRACTICAL EXPERIENCE (SCPE) SURGERY 2

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

Assistant Director of Clinical Education: Shari LeFauve, MS, PA-C (email: sal2037@med.cornell.edu)

Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical rotation is to provide the physician assistant student with practical exposure to patients with commonly encountered surgical disorders unresolved by conservative care. It is designed to augment, strengthen, and refine the student's knowledge of practice, problem solving capabilities, technical and interpersonal communication skills, and principles of professional practice learned in the didactic phase of education. Students develop the ability to distinguish between acute, chronic, or emergent patient presentations. This rotation allows students to actively participate in all phases of surgical care, participating as an integral member of the surgical care team. Under the direct supervision of attending physicians, house staff physicians and physician assistants, the student will be responsible for performing history and physical examinations, order and interpret diagnostic labs and expedite procedures under direct supervision, to determine best practice medical and surgical care plans for patients of all ages (infant, child, adolescent, adult, and elderly patients). The student may participate as a first or second assistant or OR observer in the outpatient, ambulatory, or inpatient operating room settings if approved by the lead surgeon and rotation preceptor.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES for SURGERY

At the conclusion of the Surgery Supervised Clinical Practical Experience (SCPE), the PA student must successfully demonstrate the fund of knowledge and critical thinking necessary to align with documented rotation outcomes. This is measured by **achieving a 70% or more on the**

End-of-Rotation Examination and receiving a **satisfactory preceptor evaluation** (**of 70% or more**). These measures serve to attest to the satisfactory completion of rotation specific attributes necessary to attain program identified competencies.

1. KNOWLEDGE – In the practice of Surgery for patients across the lifespan, demonstrate and apply knowledge of the peri-operative evaluation, and management of surgical patients in the ambulatory or inpatient surgical care settings for patients presenting to receive elective or emergent surgical care. This will include knowledge of the peri-operative patient optimization through collaborative management of care across the lifespan.

   [Preceptor Evaluation: 1] **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

2. CLINICAL REASONING – In the practice of Surgery through comprehensive collaborative patient evaluation in the ambulatory, or inpatient operating room settings, formulate an appropriate differential diagnosis and identify the most likely diagnosis for patients presenting for elective or emergent surgical care.

   [Preceptor Evaluation: 2] **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

3. CLINICAL and TECHNICAL SKILLS - In the practice of caring for Surgery patients in the peri-operative and operating room settings under direct preceptor supervision, the student can perform the following common tasks and procedures including but not limited to Pre-operative, peri-operative, intra-operative, post-operative and outpatient surgical patient care across the lifespan.

   [Preceptor Evaluation: 2, 3, 6, 7] **(Person-Centered Care)**

4. HISTORY and PHYSICAL EXAMINATION- Obtain a history and physical relevant to the practice of surgery in the peri-operative and post-operative room settings. This documentation will utilize an effective exchange of information from patient and/or caregiver(s) to clinicians that meet the needs of the individual patient and that is respectful of diverse patient and clinician colleague populations. Student's demonstration of adaptability to communicate effectively with varied age, language fluency, abilities, verbal, hearing, or speech challenges and ever mindful of the cultural and emotional complexities witnessed in all healthcare

environments.

[Preceptor Evaluation: 4] **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

5. PRESENTATION- In the practice of Surgery, clearly communicate with patients and collaborative healthcare team members, pertinent information gathered from the patient and considering all patient specific data collected through history taking, physical exams, laboratory, and diagnostic testing, present and effectively discuss clinical information in a concise and coherent manner.

[Preceptor Evaluation: 6] **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

6. DOCUMENTATION - In the practice of Surgery documents all elements of the patient encounter using the appropriate formatting of H&P or SOAP note that correlates to the nature of the patient encounter adhering to the medical, legal, and ethical standards of care. Document clinical information in an accurate and concise manner and navigate the electronic health record.

[Preceptor Evaluation: 7] **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

7. PROFESSIONALISM – Demonstrate the ability to perform as a member of a surgical care team. Demonstrate an appropriate healthcare team collaborative interaction that demonstrates

an eagerness to learn and includes self-reflection and goal setting essential to professional development.

[Preceptor Evaluation: 8] **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

COMPONENTS OF ROTATION	SUCCESSFUL COMPLETION	COMPONENT WEIGHTS
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MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	5%
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	10%
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required	5%

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the surgery rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection, and goal setting directed toward ongoing advancement of skills to adequately demonstrate the following:

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- Knowledge of Practice - In the practice of Surgery, students will apply and further develop their knowledge of most encountered clinical scenarios including, but not limited to:
    i. Abdominal distension
    ii. Abdominal pain
    iii. Anorexia
    iv. Breast mass
    v. Burns
    vi. Constipation
    vii. Dehydration
    viii. Diarrhea
    ix. Dyspepsia
    x. Dyspnea
    xi. Dysuria
    xii. Fatigue
    xiii. Fever
    xiv. Organ, joint, bone, vascular, nerve, or soft tissue pain
    xv. Hematemesis
    xvi. Hematochezia
    xvii. Hematuria
    xviii. Hypotension
    xix. Jaundice
    xx. Lymphadenopathy
    xxi. Melena
    xxii. Nausea

xxiii. Nipple discharge
xxiv. Obstipation
xxv. Pyuria
xxvi. Referred pain
xxvii. Breast, Bone, Soft Tissue, or Organ mass/pain
xxviii. Vomiting
xxix. Weight loss

b. Fluid and electrolyte related acid base problems (with emphasis on composition of fluid compartments, regulation of sodium, water and osmolarity), disorders of volume (depletion, excess), disorders of electrolyte concentration (Na, K, Ca, Mg, Cl, P), disorders of acid-base balance and fluid and electrolyte therapy
c. Shock: Hypovolemic, cardiogenic, septic, and neurogenic
d. Conditions of the Head and Neck
e. Benign lesions (lip, oral cavity and paranasal sinuses), carcinomas, connective tissue sarcomas, Kaposi's sarcoma, inflammatory conditions, infections and tumors of the salivary glands.
f. Thyroid and Parathyroid : Thyrotoxicosis, hypothyroidism, thyroiditis, goiter, benign and malignant tumors, hyperparathyroidism, parathyroid carcinoma
g. Diseases of the Breast : Common breast disorders including but not limited to inflammation and infectious disorders, gynecomastia, benign lesions, fibroadenomatous and fibrocystic disease and carcinoma of the breast.
h. Chest, Lung, and Mediastinum: Thoracic injuries, chest wall congenital deformities and tumors, pleural effusions, empyema, and spontaneous pneumothorax, congenital lung lesions, pulmonary infections, primary carcinoma of the lung and metastatic tumors, thymomas and lymphoma.
i. Esophagus, stomach and duodenum: Peptic ulcer disease (i.e. bleeding, perforation, obstruction, intractability), gastric outlet obstruction, pyloric stenosis, malignancies of the stomach, gastric ulcer and duodenal ulcer, esophageal webs, esophageal varices, Barrett's esophagus, obesity.
j. Small or large bowel disorders, colon, rectum, anus, appendix: Carcinoma of the colon, rectum and anus, anal fissures and fistulas, perianal infections, inflammatory bowel disease (Crohn's disease and ulcerative colitis), small bowel or colonic obstruction, hemorrhoids, acute appendicitis with and without perforation, acute diverticulitis, volvulus, mesenteric ischemia, direct/indirect/incarcerated hernias, adhesions, toxic

megacolon.

k. Liver, biliary system and pancreas: Portal hypertension, infections and neoplasms of the liver, gall bladder; gall bladder disease including biliary colic, cholelithiasis, cholecystitis and common bile duct disease; acute and chronic pancreatitis, neoplasms of the pancreas.
l. Diseases of the Great Vessels: Aneurysms of the aorta, traumatic thoracic aneurysms, traumatic thoracic aneurysms, non- penetrating injuries, atherosclerosis.
m. Peripheral Arterial and Venous Disease: Abdominal aortic aneurysms (AAA), cardiac emboli, arterial thrombosis, the diabetic foot, acute mesenteric ischemia, deep vein thrombosis (DVT), varicose veins, chronic venous insufficiency, and lymphedema.
n. Endocrine: Benign and malignant diseases of the adrenals, multiple endocrine neoplastic syndromes, pheochromocytoma
o. Hernias: Inguinal, sliding, ventral, and femoral
p. Miscellaneous: MRSA infections, decubital ulcers, gangrene, compartment syndrome
q. Define the basic anatomy and physiology of the skin and describe the principles of wound care associated with phases of wound healing, factors affecting wound healing, general principles of management of clean, clean- contaminated and contaminated wounds.
r. Describe the surgical management of trauma (penetrating injuries, pressure ulcers, keloids), infections (viral and bacterial), benign and malignant tumors (basal and squamous cell carcinoma, malignant melanoma).
s. Assess a patient's nutritional status; determine nutritional needs, prevention, and treatment of nutritional deficits in surgical patients with emphasis on techniques of nutritional support including enteral and parenteral routes, complications of nutritional therapy, and controversies in nutritional support of surgical patients.
t. Discuss the homeostatic process and the evaluation of potential bleeding disorders with emphasis on the causes of surgical bleeding, blood replacement therapy including the estimation of transfusion requirements as well as blood component therapy.
u. Discuss the endocrine response (classic hormonal response pattern) to infection and surgical trauma with emphasis on auto regulatory mechanisms of pituitary-adrenal axis, renal response (rennin, AHD) and altered substrate utilization during injury.
v. Discuss the pathogenesis, prevention, and management of established infections with emphasis on diagnosis and treatment of common surgical infections.
w. Assess and propose the proper intervention for suspected wound infections/cellulitis.

x. Identify the indications for conservative vs. operative management of patients presenting with common surgical problems.
y. Review and apply the appropriate preventative screening guidelines for cancers of the gastrointestinal tract and breast.
z. Review the safety hazards associated with the Operating Room suite. Define the names, uses, and handling of common surgical instruments.
aa. Identify the basic steps involved in the common surgical procedures in which they will be involved.
bb. Define the composition of various suture materials and define the common surgical stitches, ties and knots.
cc. Scientific Concepts:
    i. Pathophysiology
    ii. Anatomy/Physiology
    iii. Microbiology
    iv. Genetic and molecular mechanisms of health and disease in the practice of surgery.
    v. Epidemiology of common diseases encountered in the practice of surgery.

- History Taking and Physical Examination
- Diagnostic Studies: The student is expected to interpret diagnostic studies and to employ the results in developing a differential diagnosis and formulating a treatment plan, including laboratory, imaging, and radiological studies
- Diagnosis: Formulating differential diagnoses and assessing likelihood of diagnosis for common complaints encountered in a surgical setting including but not limited to:
- Clinical Interventions:
    a. Therapeutic procedures
    b. Treatment planning with associated counseling and education
    c. Monitoring,
    d. Identifying complications
- Clinical Therapeutics:
    a. Pharmacology and pharmacotherapeutics
    b. fluid and electrolytes
    c. Health Maintenance:
    d. Screening
    e. counseling on preventable diseases,

f. communicable diseases,
g. immunization schedules
h. healthy lifestyles; impacts of stress, aging, environment, and abuse.
i. Demonstrate and apply the comprehension of medical research and evidence-based medicine to the clinical practice of surgery.

- Clinical and Technical Skills - In the practice of surgery, the student is expected to be able to:
    a. Develop management plans that prioritize clinical interventions based on patient condition, including the ordering and interpretation of appropriate diagnostic testing.
    b. Demonstrate management of:
        i. wound care
        ii. shock
        iii. Infections
        iv. pre-operative evaluation
        v. peri-operative complications
        vi. post-operative conditions and treatment
    c. Elicit a thorough, problem-focused medical history of a patient in the surgical setting.
    d. Orally present clear and concise patient presentations and discussions of cases.
    e. In the practice of Surgery, with direct preceptor supervision, perform the following tasks and procedures:
        i. Complete a pre-operative physical examination H&P
        ii. Pre-operative documentation of problem-focused History and Physical
            1. To include interpretation of normal and abnormal findings
        iii. Gowning, gloving, and scrubbing.
        iv. Intra-operative:
            1. Sterile technique while assisting in OR
            2. Intraoperative:
                a. knot tying
                b. wound closure including suture and staple placement
        v. Documentation: Brief Operative Note
        vi. Post-Operative management, discharge planning, patient education and discharge summary documentation
            1. Wound care
            2. Staple and suture removal

vii. Apply the principles of patient safety, healthcare quality, and minimizing medical error
viii. Identify and respond appropriately to urgencies and emergencies in Surgery
ix. Apply the principles of nutrition in Surgery
x. Describe how structural determinants of health impact patient outcomes in Surgery

- Professionalism, Behaviors, and Interpersonal Skills - In the practice of surgery, the student is expected to:
    a. Present a professional appearance and attitude when interacting with patients and peers.
    b. Perform his/her duties with a professional attitude comprising such areas of attendance, reliability, accurate reporting, and personal comportment, dress code and general demeanor.
    c. Relate and perform professionally in the working situation with other members of the healthcare team.
    d. Ask appropriate questions to obtain further knowledge.
    e. Recognize his/her limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.
    f. Demonstrate an ability to accept constructive criticism and develop a pattern of self-assessment and improvement.
    g. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.
    h. Demonstrate having done independent outside reading regarding problems seen.
    i. Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.
    j. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.
    k. Appreciate the health care problems of the individual patient as well as those of the appropriate cultural groups.
    l. Appreciate the physical, psychic, social and economic distress created by the health problem.
    m. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem.

n. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.
o. Participate in surgical operations, having reviewed the proper steps of the procedure.

ACADEMIC INTEGRITY

Students are expected to abide by the Weill Cornell Graduate School Code of Academic Integrity. The Clinical Year Guidelines & Syllabus identifies Student Responsibilities & Honor Code as follows: In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Available on the Weill Cornell Medicine Library website

Schwartz's Principles of Surgery,11th edition, F. Brunicardi. McGraw Hill, 2019

Current Surgical Diagnosis and Treatment, 15th edition. Doherty. McGraw Hill, 2020

Sabiston Textbook of Surgery, 21st edition. Townsend, C. Elsevier, 2021

*Additional Reading: May be assigned by the Directors of Clinical Education

PAS 7060 SUPERVISED CLINICAL PRACTICE – FAMILY MEDICINE/ PRIMARY CARE

COURSE DIRECTORS

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Assistant Director of Clinical Education: Shari LeFauve, MS, PA-C (email: sal2037@med.cornell.edu)

Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical course is to provide the physician assistant student with practical exposure to an outpatient setting that provides continuity of care to all members of the family across the age spectrum including child, adolescent, and adult. This practice-based experience provides context to the healthcare needs of the family in relationship to the health and well-being of the community. This supervised experience is designed to augment and strengthen the student's knowledge for clinical practice and patient-centered care while refining the skills learned in the didactic phase. The student will actively function as an integral member of the healthcare team while under the direct supervision of the attending physician or PA thus modeling professionalism, interpersonal communication, and behaviors that are key to the success of a practicing physician assistant.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES

At the conclusion of the Family Medicine /Primary Care supervised clinical practical experience (SCPE), the PA student must successfully demonstrate the fund of knowledge gained while on

rotation by **achieving a 70% or more on the End-of-Rotation Examination** and receipt of a **satisfactory preceptor evaluation scoring 70% or more** thus attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

17. HISTORY- Obtain a detail-oriented history relevant to a primary visit or specific clinical complaint(s) that utilizes an effective exchange of information from a patient and/or proxy that meet the needs of a diverse population including adaptability to communicate with varied age, fluency, or disability, and mindful to cultural and emotional complexity. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

18. PHYSICAL EXAMINATION - Perform a complete or problem-focused physical examination using clinical skills consistent with patient-centered care throughout all aspects of evaluation to include adaptive awareness of physical limitations. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

19. CLINICAL REASONING - Provide a rationale for selecting and interpreting laboratory, and/or diagnostic testing such as ECG based on data acquisition with attention given to the distinction between urgent, emergent, and chronic disease management and adherence to the guidelines consistent with the standard of care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

20. TECHNICAL SKILLS - Perform therapeutic procedures commonly encountered in a family medicine setting including, but not limited to, PFT, injections, suturing, or splinting consistent with informed consent, preceptor observation, and proficiency. ***[Preceptor Evaluation: 4]*** **(COMPETENCY: Patient-Centered Care, Problem-based Learning)**

21. PRESENTATION- Communicate to the preceptor pertinent information gathered from the patient diagnostic testing that appropriately characterize the presenting complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include education related to disease, management, or prevention in a clear and understandable manner. ***[Preceptor Evaluation: 5]*** **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

22. DOCUMENTATION - Document all elements of the patient encounter distinguishing acute

from chronic problems using the appropriate formatting of H&P or SOAP note that correlates to the nature of the office visit adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

23. KNOWLEDGE – Interpret clinical information that demonstrates review of the literature and comprehension of diagnosis, range of treatment options including pharmacotherapeutics, and limitations that necessitate the escalation of care in circumstances that include acute life-threatening medical, behavioral, or chronic medical problems. ***[Preceptor Evaluation: 7]*** **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

24. PROFESSIONALISM – Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection essential to professional development. ***[Preceptor Evaluation: 8]*** **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	**SUCCESSFUL COMPLETION**	
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (120) MC questions	
END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	Threshold met of Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required. Feedback from preceptor is formative	
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the family practice/primary care medicine rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection, and ongoing improvement to adequately demonstrate the following:

Knowledge for Practice & Practice-Based Learning

Throughout rotation, students must review the Family Medicine /Primary Care list of diagnoses that are commonly encountered in this practice setting. PA students are expected to strengthen didactic-phase learning and be able to apply their knowledge to the following:

19. Clinical presentations: Summarize the natural history, and prognosis of diseases commonly encountered in family medicine/primary care including, but not limited to:
    - xv. Cardiovascular
        - a. Angina
        - b. Arrhythmia
        - c. Atherosclerosis
        - d. Cardiomyopathy
        - e. Congestive heart failure
        - f. Coronary artery disease
        - g. Deep vein thrombosis
        - h. Hyperlipidemia
        - i. Hypertension
        - j. Myocardial Infarction
        - k. Peripheral vascular disease

l. Rheumatic heart disease
m. Valvular heart disease
n. Vascular disease

xvi. Dermatology
a. Acne
b. Cellulitis
c. Dermatoses
d. Herpes zoster
e. Neoplasms
i. Basal Cell Carcinoma
ii. Melanoma
iii. Squamous Cell Carcinoma
f. Pityriasis rosea
g. Psoriasis
h. Rosacea
i. Urticaria

xvii. Endocrinology
a. Diabetes mellitus (type 1 and type 2)
b. Hyperthyroidism
c. Hypothyroidism
d. Pheochromocytoma
e. Thyroid cancer

xviii. Gastroenterology
a. Acid reflux
b. Anal fissure/fistula
c. Cancer (colon, esophagus, hepatic, pancreatic, stomach, rectal)
d. Celiac disease
e. Cholecystitis
f. Cholelithiasis
g. Cirrhosis
h. Constipation
i. Diarrhea
j. Diverticulosis/diverticulitis
k. Gastritis

l. Gastroenteritis
m. Hepatitis (acute and chronic)
n. Hemorrhoids
o. Inflammatory bowel disease (ulcerative colitis, Crohn's disease)
p. Irritable bowel syndrome
q. Pancreatitis (acute and chronic)
r. Peptic ulcer disease

xix. Gynecology
a. Amenorrhea
b. Menorrhagia/Metrorrhagia
c. Pelvic inflammatory disease
i. STI (chlamydia, gonorrhea)
d. Polycystic ovarian syndrome

xx. Hematology
a. Anemia (chronic disease, iron deficiency, pernicious)
b. Clotting factor disorders (Factor 5 Leiden)
c. Lymphomas
d. Multiple myeloma
e. Sickle Cell Anemia
f. Thalassemia(s)

xxi. Infectious Disease
a. Candidiasis
b. Herpes (simplex or zoster)
c. Human Immunodeficiency Virus/AIDS
d. Impetigo
e. Legionnaires disease
f. Lyme disease
g. Mononucleosis
h. Strep throat
i. Toxoplasmosis
j. Tuberculosis
k. Viral - adenovirus, influenza, RSV, SARS CoV-2

xvii. Musculoskeletal/Rheumatology
a. Carpal tunnel syndrome

b. Epicondylitis
c. Fibromyalgia
d. Gout/pseudogout
e. Osteoarthritis
f. Osteopenia/-porosis
g. Rheumatoid arthritis
h. Systemic lupus erythematosus

xxii. Neurology
a. Bell's palsy
b. Cerebral vascular accident
c. Delirium
d. Dementia
e. Drug and alcohol use disorder
f. Headache (cluster, migraine, tension)
g. Migraine
h. Multiple sclerosis
i. Parkinson's disease
j. Seizure
k. Syncope

xxiii. Ophthalmology
a. Conjunctivitis
b. Corneal abrasion

xxiv. Otorhinolaryngology
a. Hearing loss
b. Otitis externa/media
c. Sinusitis
d. Vertigo

xxv. Psychiatry
a. Alcohol and drug use disorder
b. Attention deficit hyperactivity disorder
c. Depression
d. Insomnia

xxvi. Pulmonary
a. Asthma

b. Bronchitis
c. Cancer (small cell)
d. Chronic obstructive pulmonary disease
e. Croup
f. Pertussis
g. Pneumonia
h. Sarcoidosis

xxvii. Urology

a. Cancer (bladder, prostate, renal cell)
b. Erectile dysfunction
c. Nephrolithiasis
d. Prostatic hypertrophy
e. Pyelonephritis
f. Urethritis (chlamydia/gonococcal)
g. Urinary tract infection

20. Scientific Concepts: Explain the anatomy, physiology, pathophysiology, biochemistry, microbiology, genetic, and molecular mechanisms of health versus disease. Be familiar with credible resources to refine core knowledge thus maintaining the highest quality standard of care of health promotion and disease prevention.

21. History Taking: Gather a problem-focused or comprehensive history depending on the nature of the visit maintaining professionalism, compassion, and the capacity to adapt the exam to the age of the patient.
    i. Determine the reason for the visit establishing if this is for a well visit, acute problem or ongoing management of an existing problem(s)
        1. Well-child
            a. School physical
            b. Sports physical
        2. Adult
            a. Annual physical
            b. Employment physical
            c. Pre-operative clearance
    ii. Identify preferred pronouns, gender identity.

iii. Communicate effectively with the patient, or proxy to ensure an effective exchange of information that is comprehensive and inclusive.
iv. Establish the attributes of the problem noting the location, mechanism, onset, pain, provocation, palliation, quality, radiation, severity, and treatment response.
v. Elicit comprehensive past medical history noting date of diagnosis, recent intervention, and the current status, note genetic predisposition to disease.
vi. Gather surgical history, date, and outcome.
vii. Obtain immunization status.
viii. Update list of medications, both prescriptive, over the counter, and/or complimentary
ix. List all allergies, reaction, specify medication, environmental, and food.
x. Quantify alcohol, tobacco, and/or recreational substance.
xi. Obtain social history including domestic partner, children, occupation, diet, and exercise.
xii. Gather sexual history, past sexually transmitted infections, pregnancy including the current status and outcome.
xiii. Perform a comprehensive or problem-specific review of symptoms to gain appropriate information to clarify active or chronic disease states.

22. Physical Examination: Demonstrate awareness that indicates adaptability to meet the needs of persons with disability.
    i. Apply historic information to guide an appropriate physical examination commensurate with the presenting issue(s)
    ii. Perform an appropriate physical according to the age of the patient being mindful of limitations that necessitate adaptability of exam.
    iii. Use instruments safely to guide a thorough examination appropriate to the presenting complaint including, but not limited to:
        1. Scale and stadiometer to gather BMI
        2. Sphygmomanometer and stethoscope for BP
        3. Pulse oximeter
        4. Thermometer
        5. Otoscope
        6. Ophthalmoscope
        7. Snellen chart

8. Stethoscope
9. Reflex hammer
10. Tuning forks

23. Diagnostic Studies: Recommend a diagnostic approach or interpret diagnostic studies and to employ the results in developing a differential diagnosis and formulating a treatment plan, including laboratory, imaging, and radiological studies.
    i. Recognize and provide rationale for ordering laboratory or diagnostic studies.
    ii. Fully explain benefits and risks of testing
    iii. Provide patient education on preventive testing maintaining best practices.
    iv. Be cognizant of access to care and insurance coverage impacting patient testing.

24. Diagnosis: Formulate a list of differential diagnoses and assess the likelihood of diagnosis.
    i. Distinguish between acute, emergent, and chronic issues.
    ii. Establish priority of issues identifying potentially life-threatening conditions
    iii. Provide clinical reasoning necessary to prioritize most likely diagnosis from alternative differentials.
    iv. Be cognizant of limitations in medical knowledge, asking for guidance to ensure the highest quality of care.

25. Clinical Interventions: Propose Therapeutic procedures, treatment planning with associated counseling and education, monitoring, identifying complications.
    i. Develop a plan of intervention that is patient-centered and based on assessment, consider patient partnership in all interventions.
    ii. Refer to specialty including but not limited to:
        1. Allergy
        2. Cardiology
        3. Endocrinology
        4. Obstetrics/Gynecology
        5. Oncology
        6. Ophthalmology
        7. Pulmonary
        8. Psychiatry
        9. Surgery

iii. Referral to community resources including but not limited to:
    1. Physical therapy
    2. Occupational therapy
    3. Registered dietician
    4. Social work

26. Clinical Therapeutics: Identify Pharmacology and pharmacotherapeutics, fluid and electrolyte management.
    i. Act on laboratory testing to correct imbalances.
    ii. Understand mode of pharmacologic degradation and dosage adjustment necessary in renal or hepatic insufficiency
    iii. Attention to drug interactions and harms reduction.

27. Health Maintenance: Select Screening, counseling on preventable diseases, communicable diseases, immunization schedules, and healthy lifestyles; impacts of stress, aging, environment, abuse and resources.
    i. Identify issues related to delays of growth and development, initiate appropriate referrals to maximize community resource and meet educational needs.
    ii. Utilize wide range of agency standards including but not limited to the American Heart Association, American College of Cardiology, the Centers for Disease Control, and Diabetic Prevention Program to maintain the highest standards of care.
        1. Screen for depression and suicidality and initiate appropriate counseling.
    iii. Screen for domestic violence and provide community resources.
    iv. Maintain scheduled immunizations to promote community health and well-being.

Person-Centered Care that includes Clinical and Technical Skills and Clinical Reasoning

In the practice of family medicine/primary care, the PA student is expected to improve proficiency with patient-specific evaluation that considers accessibility, disability, and health equity.

Students will be evaluated based on the following:

a. Develop management plans that prioritize clinical interventions based on patient acuity, including the ordering and interpretation of appropriate diagnostic testing including but not limited to
    i. Laboratory testing

ii. MR
iii. Radiography

b. Demonstrate management of commonly encountered acute injuries such as sprains or strains, insect bites, wounds, or infections with preceptor supervision.
v. Hemostasis
vi. Stabilization
vii. Selection of pharmacotherapeutics appropriate to the presenting complaint

c. Gather a thorough, problem-focused medical history in an unbiased and emotionally intelligent manner that adjusts according to barriers such as fluency or health literacy.
i. Gather information from a second party as in the case of a parent, child, or care-giver

d. Present clear and concise patient presentations and discussions of cases.
i. Classify information in a sequential manner fully describing the presenting complaint, physical exam, and clinical reasoning for selection of diagnosis and treatment plan
ii. Become familiar with data acquisition for the following signs and symptoms:
1. Abdominal pain
2. Anorexia
3. Arthralgia
4. Chest pain
5. Claudication
6. Constipation
7. Cough
8. Diarrhea
9. Dizziness
10. Dyspepsia
11. Dyspnea
12. Edema
13. Fatigue
14. Fever
15. Headache
16. Hematuria
17. Incontinence
18. Low back pain

19. Nausea/vomiting
20. Polyuria
21. Syncope
22. Vertigo
23. Weakness
24. Weight loss

e. Perform the following common tasks and procedures, with direct preceptor supervision:
    i. Evaluation and documentation, H&P and SOAP/progress notes.
        1. Perform a thorough, problem-focused physical examination and differentiate normal from abnormal findings for all ages.
            a. Well-child
            b. Adolescent
            c. Adult
        2. Accurately document a complete or directed patient encounter specific to the age of the patient, nature of the issue and including co-morbid conditions
            a. All notes should be a reflection of professional integrity including appropriate characterization of presenting complaint, diagnosis and treatment plan
    ii. Discuss intended procedure such as suturing with preceptor before attempting.
    iii. Explain Procedural essentials:
        1. Understands the indications, contraindications, and complications for procedures such as immunization
        2. Demonstrates proper technique including but not limited to
            a. Blood glucose
            b. ECG
            c. Immunization
            d. Throat culture
            e. Urinalysis (dipstick)
            f. Venipuncture
            g. Wound culture
    iv. Document: Procedural documentation is complete:
        1. In the instance of suturing, provide detailed description of wound, cleansing, anesthesia, closure, and disposition

2. Appropriately select diagnosis codes

v. Provide Disposition, patient education, and any necessary consultations must be clear.
   1. Management of commonly encountered injuries, wounds, or infections including symptoms necessitating prompt medical or surgical attention.
   2. Orthopedic referral

vi. Apply the principles of patient and provider safety, healthcare quality, and minimizing medical error.

vii. Identify and respond appropriately to urgencies and emergencies in a Family Medicine/Primary Care setting.

viii. Apply the principles of nutrition in the management and /or prevention of disease in the Family Medicine/Primary Care setting.

ix. Describe how population determinants of health impact patient outcomes including food insecurity, insurance accessibility, and community resources.

x. Understand the work-flow unique to the outpatient setting.

Interpersonal Skills, Interprofessional Collaboration, and Professionalism

In Family Medicine/Primary Care, the PA student is expected to develop communication styles that adapt to the collection of information secondarily from a parent presenting with a child, or an adolescent, an adult, or a geriatric patient, develop collaborative relationships with members of the medical team, and develop self-awareness of knowledge limitations consistent with life-long learning.

Students will be evaluated on the following:

c. Present a professional appearance when interacting with patients and peers.
   i. Wear clean lab coat and ID
   ii. Be sure instruments are clean to prevent communicable spread of disease.

dd. Perform duties with a professional attitude comprising such areas of attendance, reliability, personal comportment, and general demeanor.

ee. Relate and perform professionally in the working situation with other members of the healthcare team.
   i. Understand the roles and responsibilities of all members of the healthcare team essential to the provision of optimal patient centered care.

ff. Ask appropriate questions and show evidence of independent study to obtain further

knowledge.

xi. On-going study is essential to expansion of knowledge appropriate to an effective PA.

xii. Life-long learning is a tenant of the profession.

gg. Recognize one's limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.

hh. Demonstrate an ability to accept constructive criticism and develop a pattern of self-assessment and improvement.

ii. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.

jj. Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.

kk. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.

ll. Demonstrate skills including flexibility, adaptability, open communication, referral, use of evidence-based practice to support decision-making and mutual goal setting for patients with disabilities.

mm. Provide anticipatory guidance related to car seats, seat belts, firearms, and behaviors that may pose additional risk.

nn. Appreciate the health care problems of the individual patient as well as those of the cultural community.

oo. Appreciate the physical, psychic, social and economic distress created by the health problem and social construct.

pp. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem(s).

qq. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.

rr. Participate fully to gain the best possible preceptor and self-directed learning experience possible.

ACADEMIC INTEGRITY

Students are expected to abide by the Weill Cornell Graduate School Code of Academic Integrity.

The Clinical Year Guidelines & Syllabus identifies Student Responsibilities & Honor Code as follows:

In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Available on the Weill Cornell Medicine Library website

Current Diagnosis and Treatment: Family Medicine, 5th ed., J. South-Paul, S. Matheny, E. Lewis, McGraw-Hill, 2020.

Current Practice Guidelines in Primary Care 2021-2022, Esherick, J., et. al., McGraw-Hill, 2022.

Principles of Ambulatory Medicine, 7th ed., Flebach, N., et. al., Lippincott/Williams and Wilkins, 2012.

Additional Reading: May be assigned by the Directors of Clinical Education

PAS 7070 SUPERVISED CLINICAL PRACTICE – PEDIATRICS

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

Assistant Director of Clinical Education: Shari LeFauve, MS, PA-C (email: sal2037@med.cornell.edu)

Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical course is to provide the physician assistant student with practical experience caring for pediatric patients. This experience provides context to the healthcare needs of the infant, child, adolescent, or young adult in relationship with the parent(s), caregiver (s), or greater community. This supervised experience is designed to augment and strengthen the student's knowledge for clinical practice and patient-centered care while refining the skills learned in the didactic phase including the spectrum of anticipatory guidance unique to this patient population. The student will actively function as an integral member of the healthcare team while under the direct supervision of the attending physician or PA thus modeling professionalism, interpersonal communication, and behaviors that are key to the success of a practicing physician assistant.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES

At the conclusion of the Pediatric supervised clinical practical experience (SCPE), the PA student is expected to successfully demonstrate the fund of knowledge gained while on rotation by **achieving a 70% or more on the End-of-Rotation Examination** and receipt of a **satisfactory preceptor evaluation** attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

25. HISTORY- Obtain a detail-oriented history appropriate to the patient's age and type of encounter including a well- or problem-focused visit that utilizes an effective exchange of information from a patient, parent, or caregiver to include perinatal course if applicable, and

behavioral, educational, or socioeconomic factors relevant to growth and development. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

26. PHYSICAL EXAMINATION - Perform an age-appropriate physical examination for a neonate, infant, child, or adolescent that include careful attention to the growth curve, developmental stages, evidence of delays, harms, and adaptive awareness of physical limitations. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

27. CLINICAL REASONING - Provide a rationale for selecting and interpreting laboratory, and/or diagnostic testing such as blood glucose or throat culture based on data acquisition with attention given to the distinction between urgent, emergent, chronic, and preventive healthcare using guidelines consistent with the standard of care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

28. TECHNICAL SKILLS - Perform therapeutic procedures commonly encountered in a pediatric setting including but not limited to providing immunizations or nebulizer treatment consistent with informed consent, preceptor observation, and proficiency. ***[Preceptor Evaluation: 4]*** **(COMPETENCY: Patient-Centered Care, Problem-based Learning)**

29. PRESENTATION- Communicate pertinent information gathered from the patient, and/or caregiver as well as diagnostic testing to the preceptor that appropriately characterize the presenting complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include anticipatory guidance to patient and/or caregiver(s) in a clear and understandable manner. ***[Preceptor Evaluation: 5]*** **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

30. DOCUMENTATION - Document all elements of the patient encounter distinguishing well-visit from acute or chronic problems using the appropriate formatting of H&P or SOAP note that correlates to the nature of the office visit adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

31. KNOWLEDGE – Interpret clinical information that demonstrates review of the literature and comprehension of diagnosis, range of treatment options including pharmacotherapeutics and appropriate dosage calculation, as well as limitations that necessitate the escalation of care in circumstances that include acute life-threatening medical, behavioral, harms, or developmental delays. ***[Preceptor Evaluation: 7]*** **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

32. PROFESSIONALISM – Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection essential to professional development. ***[Preceptor Evaluation: 8]*** **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	SUCCESSFUL COMPLETION	
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (120) MC questions	
END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	Threshold met of Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93

HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the Pediatric rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection and ongoing improvement to adequately demonstrate the following:

Knowledge for Practice & Practice-Based Learning

Throughout rotation, students must review the Pediatric list of diagnoses that are commonly encountered in this practice setting. PA students are expected to strengthen didactic-phase learning and be able to apply their knowledge to the following:

28. Clinical presentations: Summarize the natural history, and prognosis of diseases commonly encountered in pediatrics, including but not limited to:
    - xxviii. Growth and Development
        a. Failure to Thrive
        b. Marfan Syndrome
        c. Newborn errors of metabolism
        d. Obesity
    - xxix. Cardiovascular
        a. Congenital malformations including Tetralogy of Fallot, patent ductus arteriosus
        b. Hypertrophic cardiomyopathy
        c. Myocarditis
        d. Rheumatic heart disease
    - xxx. Dermatology
        a. Acne
        b. Dermatitis
        c. Molluscum
        d. Pityriasis rosea
        e. Roseola
        f. Verrucae

xxxi. Endocrinology
    a. Diabetes mellitus
    b. Growth hormone deficiency
    c. Hyperthyroidism
    d. Hypothyroidism

xxxii. Gastroenterology
    a. Appendicitis
    b. Celiac disease
    c. Colic
    d. Hirschsprung's disease
    e. Inguinal hernia
    f. Intussusception
    g. Jaundice
    h. Lactose intolerance
    i. Pyloric stenosis
    j. Rotavirus

xxxiii. Genitourinary
    a. Amenorrhea
    b. Glomerulonephritis
    c. Precocious Puberty
    d. Testicular cancer
    e. Urinary tract infection

xxxiv. Hematology
    a. Hemolytic Uremic Syndrome
    b. Henoch-Schoenlein Purpura
    c. Idiopathic Thrombocytopenic Purpura
    d. Leukemia
    e. Lymphoma
    f. Sickle Cell anemia

xxxv. Infectious Disease
    a. Epiglottitis
    b. Epstein Barr Virus
    c. Hepatitis
    d. Impetigo
    e. Kawasaki

f. Lyme
g. Measles
h. Mumps
i. Rubella
j. Rubeola
k. Strep throat
l. Viral - adenovirus, influenza, RSV, SARS CoV-2

xxxvi. Musculoskeletal
i. Congenital hip dysplasia
j. Legg-Calve-Perthes Disease
k. Osgood-Schlatter Disease
l. Slipped Capital Femoral Epiphysis

xxxvii. Neurology
a. Autism spectrum disorder
b. Cerebral palsy
c. Headache
d. Hydrocephalus
e. Meningitis
f. Reye Syndrome
g. Seizure
h. Spina bifida

xxxviii. Ophthalmology
a. Conjunctivitis
b. Orbital cellulitis

xxxix. Otorhinolaryngology
a. Mastoiditis
b. Otitis externa/media

xl. Respiratory
a. Bronchiolitis
b. Croup
c. Cystic fibrosis
d. Hyaline membrane disease (respiratory distress syndrome)
e. Meconium aspiration syndrome
f. Pertussis
g. Pneumonia

h. Respiratory syncytial virus

29. Scientific Concepts: Explain the anatomy, physiology, pathophysiology, biochemistry, microbiology, genetic, and molecular mechanisms of health versus disease in the pediatric population. Be familiar with credible resources to refine core knowledge thus maintaining the highest quality standard of care of health promotion and disease prevention.
    i. Define the components of the APGAR score of a newborn and interpretation of results
    ii. Assess the nutritional requirements of infants and children including breast-feeding, formula, and introduction of foods
    iii. Be familiar with developmental milestones and tools for assessment including the Denver Developmental Screening Test and M-CHAT
30. History Taking: Gather a problem-focused or comprehensive history depending on the nature of the visit maintaining professionalism, compassion, and the capacity to adapt the exam to the neonatal, infant, child, or adolescent patient.
    i. Determine the reason for the visit establishing if this is for a well-visit, acute problem, or ongoing management of an existing problem(s)
    ii. Identify preferred pronouns, sexual identity
    iii. Communicate effectively with the patient, parent, or other caregiver to ensure an effective exchange of information that is comprehensive, inclusive, and maintaining appropriate situational-based confidentiality
    iv. Establish the attributes of the problem noting the location, mechanism, onset, pain, provocation, palliation, quality, radiation, severity, and treatment response.
    v. Elicit comprehensive past medical history noting date of diagnosis, recent intervention, and current status, note genetic predisposition to disease
    vi. Acquire a thorough pre-natal and birth history when applicable
    vii. Gather a thorough surgical history, date, and outcome
    viii. Obtain immunization status
    ix. Update list of medications, both prescriptive, over the counter, and/or complimentary
    x. List all allergies, reaction, specify medication, environmental, and/or food intolerance
    xi. Quantify alcohol, tobacco, and/or recreational substance
    xii. Obtain social history including family, living situation, education, diet, and exercise
        1. Adolescent HEADSS Assessment

xiii. Gather complete menstrual history, sexual history, previous sexually transmitted infections, pregnancy, and/or contraception. Inquire about sexual safety

xiv. Perform a comprehensive or problem-specific review of symptoms to gain appropriate information to clarify active or chronic disease states

31. Physical Examination: Demonstrate awareness that indicates adaptability to meet the needs of the age of the patient or persons with disability.

    i. Apply historic information to guide an appropriate physical examination commensurate with the presenting issue(s)

    ii. Perform an appropriate physical according to the age of the patient being mindful of limitations that necessitate adaptability of the physical exam

    iii. Evaluate for physical evidence of trauma or previous injury that may raise suspicion of abuse including, but not limited to:

        1. Burns
        2. Fracture

    iv. Use instruments safely to guide a thorough examination appropriate to the presenting complaint including, but not limited to:

        1. Scale and stadiometer to gather plot and trend growth curve or BMI
        2. Sphygmomanometer and stethoscope for BP
        3. Pulse oximeter
        4. Thermometer
        5. Otoscope
        6. Ophthalmoscope
        7. Snellen chart
        8. Stethoscope
        9. Reflex hammer
        10. Tuning forks

32. Diagnostic Studies: Recommend a diagnostic approach, or interpret diagnostic studies and to employ the results in developing a differential diagnosis and formulating a treatment plan, including laboratory, imaging, and radiological studies.

    i. Recognize and provide rationale for ordering laboratory or diagnostic studies

    ii. Fully explain benefits and risks of testing

    iii. Provide patient education on preventive testing maintaining best practices

    iv. Be cognizant of access to care and insurance coverage impacting patient testing

33. Diagnosis: Formulate a list of differential diagnoses and assess the likelihood of diagnosis.

i. Distinguish between acute, emergent, and chronic issues
ii. Establish priority of issues identifying potentially life-threatening conditions
iii. Provide clinical reasoning necessary to prioritize most likely diagnosis from alternative differentials
iv. Be cognizant of limitations in medical knowledge, asking for guidance to ensure the highest quality of care

34. Clinical Interventions: Propose therapeutic procedures, treatment planning with associated counseling, education, monitoring, and identifying complications.
    i. Develop a plan of intervention that is patient-centered and based on assessment, consider patient partnership in all interventions
    ii. Refer to specialty including but not limited to:
        1. Allergy
        2. Cardiology
        3. Endocrinology
        4. Gastroenterology
        5. Gynecology
        6. Neonatology
        7. Otorhinolaryngology
        8. Pulmonary
        9. Psychiatry
        10. Surgery
    iii. Referral to community resources including but not limited to:
        1. Physical/occupational therapy
        2. Psychometrist
        3. Speech language pathology
        4. Social work
        5. Early Intervention Services
35. Clinical Therapeutics: Identify pharmacotherapeutics and fluid and electrolyte management
    i. Act on laboratory testing to correct imbalances
    ii. Understand mode of pharmacologic degradation and dosage calculation based on weight, with adjustment for renal or hepatic insufficiency
    iii. Attention to drug interactions and harms reduction
36. Health Maintenance: Select screening, counseling on preventable disease, communicable disease, immunization schedules, and healthy lifestyles; with attention on safety and impacts of stress, environment, abuse and socioeconomic resources.

i. Identify issues related to delays of growth and development, initiate appropriate referrals to maximize community resources and meet educational needs
ii. Utilize wide range of agency standards including but not limited to the American Neonatology Association, American Academy of Pediatrics, and American Psychiatric Association to maintain the highest standards of care
    1. Screen for eating disorders and initiate appropriate intervention
    2. Screen for depression and suicidality and initiate appropriate counseling
iii. Screen for abuse and discuss protocols for mandated reporting
iv. Maintain scheduled immunizations to promote well-being and community health

Person-Centered Care that includes Clinical and Technical Skills and Clinical Reasoning

In the practice of Pediatrics, the PA student is expected to improve proficiency with patient-specific evaluation that considers accessibility, disability, and health equity.

Students will be evaluated based on the following:

f. Develop management plans that prioritize clinical interventions based on patient acuity, including the ordering and interpretation of appropriate diagnostic testing including but not limited to
    iv. Laboratory testing
    v. Imaging
g. Demonstrate management of commonly encountered acute injuries such as sprains or strains, insect bites, wounds, or infections with preceptor supervision.
    viii. Hemostasis
    ix. Stabilization
    x. Selection of pharmacotherapeutics and dose appropriate to the patient and presenting complaint
h. Gather a thorough, problem-focused medical history in an unbiased and emotionally intelligent manner that adjusts according to barriers such as fluency or health literacy.
    i. Gather information from a second party as a parent, or caregiver
i. Present clear and concise patient presentations and discussions of cases.
    i. Classify information in a sequential manner fully describing the presenting complaint, physical exam, and clinical reasoning for selection of diagnosis and treatment plan
j. Perform the following common tasks and procedures, with direct preceptor supervision:
    i. Evaluation and documentation, H&P.
        1. Perform a thorough, problem-focused physical examination and

differentiate normal from abnormal findings for all ages.

a. Neonatal
b. Infant
c. Child
d. Adolescent
e. Young-adult

2. Accurately document a complete or directed patient encounter with accuracy and integrity.
    a. All notes should be a reflection of professional integrity including appropriate characterization of presenting complaint, diagnosis and treatment plan

ii. Discuss intended procedure, such as giving an immunization, with preceptor before attempting.

iii. Explain Procedural essentials:

1. Understand the indications, contraindications, and complications for procedures such as immunization(s) following CDC recommendations
2. Demonstrates proper technique including but not limited to
    a. Blood glucose
    b. Immunization
    c. Point of care collections
    d. Throat culture
    e. Urine dip
    f. Venipuncture
    g. Wound culture

iv. Document: Procedural documentation is complete:

1. In the instance of suturing, provide detailed description of wound, cleansing, anesthesia, closure, and disposition

v. Provide Disposition, patient education, and any necessary consultations must be clear.

1. Management of commonly encountered injuries, wounds, or infections including symptoms necessitating prompt medical or surgical attention.
2. Orthopedic referral

vi. Apply the principles of patient and provider safety, healthcare quality, and minimizing medical error.

vii. Identify and respond appropriately to urgencies and emergencies in a Pediatric setting.

viii. Apply the principles of nutrition in the management and /or prevention of disease in the Pediatric setting.

ix. Describe how population determinants of health impact patient outcomes including food insecurity, insurance accessibility, and community resources.

Interpersonal Skills, Interprofessional Collaboration, and Professionalism

In Pediatrics, the PA student is expected to develop communication styles that adapt to the collection of information secondarily from a parent presenting with an infant, child, or an adolescent, develop collaborative relationships with members of the medical team, and develop self-awareness of knowledge limitations consistent with life-long learning.

Students will be evaluated on the following:

d. Present a professional appearance when interacting with patient, parent, and members of the medical team.

x. Wear a clean lab coat and ID

xi. Be sure instruments are clean to prevent communicable spread of disease

ss. Perform his/her duties with a professional attitude comprising such areas of attendance, reliability, accurate reporting, and personal comportment, and general demeanor.

tt. Relate and perform professionally in the working situation with other members of the healthcare team.

i. Understand the roles and responsibilities of all members of the healthcare team essential to the provision of optimal patient centered care

uu. Ask appropriate questions and show evidence of independent study to obtain further knowledge.

xii. On-going study is essential to expansion of knowledge appropriate to an effective PA

xiii. Life-long learning is a tenant of the profession

x. Recognize his/her limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.

ww. Demonstrate an ability to accept constructive criticism and develop a pattern

of self- assessment and improvement.

xx. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.

yy. Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.

zz. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their health and wellness.

aaa. Demonstrate skills including flexibility, adaptability, open communication, referral, use of evidence-based practice to support decision-making and goal-setting for patients with disabilities.

bbb. Provide anticipatory guidance related to car seats, seat belts, firearms, and sexual activity.

ccc. Appreciate the health care problems of the individual patient as well as those of the cultural community.

ddd. Appreciate the physical, psychological, social and economic distress created by the health problem and social construct.

eee. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem(s).

fff. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with all colleagues, and by using medical records appropriately.

ggg. Participate fully to gain the best possible preceptor and self-directed learning experience possible.

ACADEMIC INTEGRITY

Students are expected to abide by the Weill Cornell Graduate School Code of Academic Integrity. The Clinical Year Guidelines & Syllabus identifies Student Responsibilities & Honor Code as follows:

In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Available on the Weill Cornell Medicine Library website

Current Diagnosis and Treatment; Pediatrics 2020-2021,25th ed., W. Hay, McGraw Hill, 2020

Nelson Textbook of Pediatrics, 20thed., Kliegman R.M., Elsevier, 2018

Additional Reading: May be assigned by the Directors of Clinical Education

PAS 7080 SUPERVISED CLINICAL PRACTICE – WOMEN'S HEALTH

COURSE DIRECTORS

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COURSE DESCRIPTION

The purpose of this clinical course is to provide the physician assistant student with practical experience in the inpatient, outpatient, and surgical setting to provide non-urgent, urgent, emergency, or surgical management of gynecologic and/or obstetric issues occurring throughout the lifespan. This supervised experience is designed to augment and strengthen the

student's knowledge for clinical practice and patient-centered care while refining the skills learned in the didactic phase. The student will actively function as an integral member of the healthcare team while under the direct supervision of the attending physician or PA thus modeling professionalism, interpersonal communication, and behaviors that are key to the success of a practicing physician assistant.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES

At the conclusion of the Women's Health supervised clinical practical experience (SCPE), the PA student must successfully demonstrate the fund of knowledge gained while on rotation by **achieving a 70% or more on the End-of-Rotation Examination** and receipt of a **satisfactory preceptor evaluation achieving a score of 70% or more** thus attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

33. HISTORY- Obtain a gynecologic history that is detail-oriented and relevant to a routine or problem-focused complaint utilizing an effective exchange of information to meet the needs of a diverse population including adaptability to communicate with varied age, fluency, disability, culture, gender identity, sexual orientation, or emotional complexity. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

34. HISTORY- Obtain an obstetric history that is detail-oriented and demonstrates an effective exchange of information required to distinguish a normal pregnancy from one with warning signs indicative of maternal-fetal complication. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

35. PHYSICAL EXAMINATION - Perform a routine or problem-focused gynecologic exam using clinical skills unique to the age and stage of reproductive health, that are consistent with patient-centered care throughout all aspects of evaluation to include adaptive awareness of physical limitations. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

36. PHYSICAL EXAMINATION - Perform an obstetric examination using clinical skills

specific to the stage of pregnancy and/or delivery taking clinical suspicion of complications and best practices into consideration. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

37. CLINICAL REASONING - Provide a rationale for selecting and interpreting laboratory, and/or diagnostic testing in both gynecologic and/or obstetric management such as β-HCG or ultrasonography supported by data acquisition with attention given to the distinction between nonurgent, urgent, and emergent care adhering to the guidelines consistent with the standard of care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

38. TECHNICAL SKILLS - Perform therapeutic procedures commonly encountered in gynecologic and obstetric settings including but not limited to collection of a Papanicolaou smear or vaginal cultures, and/or providing assistance in a vaginal, cesarean delivery, or gynecologic procedures, all consistent with informed consent and preceptor supervision. ***[Preceptor Evaluation: 4]*** **(COMPETENCY: Patient-Centered Care, Problem-based Learning)**

39. PRESENTATION- Communicate pertinent information gathered from the patient and/or diagnostic testing to the preceptor that appropriately characterize the presenting visit and/or complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include patient education related to condition or health prevention in a clear and understandable manner. ***[Preceptor Evaluation: 5]*** **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

40. DOCUMENTATION - Document all elements of the patient encounter distinguishing non-urgent, urgent, and emergent in the gynecologic and obstetric settings using appropriate terminology and formatting adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

41. KNOWLEDGE – Interpret clinical information that demonstrates review of the literature and comprehension of gynecologic and/or obstetric diagnosis, and range of treatment options while cognizant of limitations that necessitate the escalation of care in circumstances that include acute life-threatening conditions warranting emergent surgical,

medical, or emotional interventions. ***[Preceptor Evaluation: 7]*** **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

42. PROFESSIONALISM – Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection essential to professional development. ***[Preceptor Evaluation: 8]*** **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	SUCCESSFUL COMPLETION	
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (120) MC questions	
END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	Threshold met of Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the women's health rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection and ongoing improvement to adequately demonstrate the following:

Knowledge for Practice & Practice-Based Learning

Throughout rotation, students must review and become familiar with the diagnoses that are commonly encountered in this practice setting. PA students are expected to strengthen didactic-phase learning and be able to apply their knowledge to the following:

37. Clinical presentations: Summarize the natural history, and prognosis of the following diseases commonly encountered in women's health, including but not limited to:
    - xli. Gynecology
        - a. Breast
            - i. Abscess
            - ii. Cystic lesions
            - iii. Fibrocystic changes
            - iv. Malignancy
            - v. Nipple discharge
        - b. Menstrual
            - i. Amenorrhea
            - ii. Menopause
            - iii. Menorrhagia
            - iv. Menometrorrhagia
            - v. Metrorrhagia
            - vi. Mittelschmerz
            - vii. Oligomenorrhea
            - viii. Pre-menstrual syndrome
            - ix. Pre-menstrual dysphoric disorder
        - c. Infection
            - i. Bacterial vaginosis
            - ii. Candidiasis
            - iii. Chancroid
            - iv. Chlamydia

v. Condyloma acuminatum
vi. Gonorrhea
vii. Herpes simplex
viii. Lymphogranuloma venereum
ix. Pediculosis pubis
x. Syphilis
xi. Trichomoniasis
xii. Pelvic inflammatory disease
xiii. Toxic shock syndrome
xiv. Urinary tract infection

d. Infertility
e. Ovary
i. Cancer
ii. Cyst
iii. Polycystic ovarian syndrome
iv. Torsion
f. Uterus
i. Cancer
ii. Endometritis
iii. Leiomyoma
iv. Position (anteverted, retroverted, retroflexed, etc.)
v. Prolapse
g. Vulvar
i. Bartholin's cyst
ii. Bartholin's abscess
iii. Vulvar dystrophies
h. Sexual assault

xlii. Obstetrics
a. Pregnancy
i. Normal
1. Gravidity and Parity
2. Braxton Hicks contractions
3. Interpretation of electronic fetal monitoring patterns
4. Physiologic changes of pregnancy

5. Prenatal care

ii. Complicated

1. Abortion (incomplete, threatened)
2. Abruptio placentae
3. Ectopic pregnancy
4. Gestational diabetes
5. Group B streptococcus positive status
6. HELLP Syndrome
7. Hypertensive disorders of pregnancy
8. Intrauterine growth restriction
9. Intrauterine fetal demise
10. Multiple gestations
11. Oligohydramnios/Polyhydramnios
12. Placenta accreta spectrum
13. Placenta previa
14. Pre-term labor
15. Hyperemesis gravidarum
16. Rh incompatibility
17. Subchorionic hematoma
18. Trophoblastic disease

iii. Delivery

1. Hemorrhage
2. Infection (GBS, HSV)
3. Malpresentation (breech)
4. Mechanical (shoulder dystocia, perineal tear)
5. Perineal lacerations
6. Premature labor
7. Premature rupture of membranes
8. Umbilical cord (compression, nuchal, prolapse)

iv. Puerperium

1. Mastitis
2. Physiologic changes
3. Postpartum anxiety
4. Postpartum “blues”

5. Postpartum depression
6. Postpartum hemorrhage
7. Postpartum psychosis
8. Retained products of conception
9. Urinary incontinence

38. Scientific Concepts: Explain the anatomy, physiology, pathophysiology, biochemistry, microbiology, genetic, and molecular mechanisms of reproductive health and disease. Be familiar with credible resources to refine core knowledge thus maintaining the highest quality standard of care of health promotion and disease prevention.
    i. Understand the physiology of the following:
        1. Menarche
        2. Menstruation
        3. Ovulation
        4. Pregnancy
            a. Physiologic changes of pregnancy
            b. Delivery
            c. Puerperium
            d. Lactation
        5. Menopause
            a. Pelvic organ prolapse
            b. Urinary incontinence
            c. Vasomotor instability
                i. Menopausal hormone therapy

39. History Taking: Gather a problem-focused or comprehensive gynecologic or obstetric history depending on the nature of the visit maintaining professionalism, compassion, and the capacity to adapt the exam depending on the patient.
    i. Determine the reason for the visit establishing if this is for an acute problem or ongoing management of an existing problem(s)
    ii. Identify preferred pronouns and gender identity
    iii. Communicate effectively with the patient, or caregiver to ensure an effective exchange of information that is comprehensive and inclusive.

iv. Establish the attributes of a presenting problem noting the location, mechanism, onset, pain, provocation, palliation, quality, radiation, severity, and treatment response.
v. Elicit comprehensive past medical history noting date of diagnosis, intervention(s), and current status, note genetic predisposition to disease.
vi. Elicit a comprehensive reproductive history specifying each of the following:
    1. Menarche and menstrual history
    2. Gravity and Parity
    3. Obstetric history including previous complications including but not limited to
        a. Congenital disorders
        b. Delivery
            i. Cesarean section
            ii. Operative vaginal delivery
        c. Hyperemesis gravidarum
        d. Hypertensive disorders of pregnancy
        e. Gestational diabetes mellitus
        f. Group B streptococcus infection
        g. Intrauterine fetal demise
        h. Preterm birth
        i. Preterm labor
        j. Rh isoimmunization and incompatibility
    4. Other co-morbidities including but not limited to
        a. Cancer(s)
        b. Clotting disorder(s)
        c. Depression
        d. Diabetes (gestational diabetes)
        e. Gastrointestinal disorders
        f. Group B streptococcal carrier status
        g. HIV + status
        h. Hypertension or other cardiovascular diagnosis
        i. Hyperthyroidism/Hypothyroidism
        j. Renal insufficiency
        k. Seizure disorder

l. Sickle cell disease
5. Past or active sexually transmitted infections
6. Previous history of sexual assault

vii. Gather surgical history, date, and outcome including Cesarean section
viii. Obtain immunization status
ix. Update list of medications, both prescriptive, over the counter, and/or complementary
x. List all allergies, reaction, specify medication, environmental, and food
xi. Quantify alcohol, tobacco, and/or recreational substance
xii. Obtain social history including domestic, sexual partner(s), children, occupation, diet, and exercise
xiii. Perform a comprehensive or problem-specific review of symptoms to gain appropriate information to clarify active or chronic disease states

40. Physical Examination: Demonstrate awareness that indicates adaptability to meet the needs of persons with disability.
    i. Apply historic information to guide an appropriate physical examination including reproductive organs commensurate with the presenting issue(s)
    ii. Perform an appropriate physical according to the age of the patient being mindful of limitations that necessitate adaptability of exam
    iii. Use instruments safely to guide a thorough examination appropriate to the presenting complaint including, but not limited to:
        1. Speculum exam

41. Diagnostic Studies: Recommend a diagnostic approach, or interpret diagnostic studies and to employ the results in developing a differential diagnosis and formulating a treatment plan, including laboratory, imaging, and radiological studies.
    i. Recognize and provide rationale for ordering laboratory or diagnostic studies
    ii. Fully explain benefits and risks of testing
    iii. Provide patient education on preventive testing maintaining best practices
    iv. Be cognizant of access to care and insurance coverage impacting patient testing

42. Diagnosis: Formulate a list of differential diagnoses and assess the likelihood of diagnosis.
    i. Distinguish between urgent, emergent, and chronic issues

ii. Establish priority of issues identifying potentially life-threatening maternal-fetal condition
iii. Provide clinical reasoning necessary to prioritize most likely diagnosis from alternative differentials
iv. Be cognizant of limitations in medical knowledge, asking for guidance to ensure the highest quality of care

43. Clinical Interventions: Propose therapeutic procedures, treatment planning with associated counseling and education, monitoring, identifying complications.
    i. Develop a plan of intervention that is patient(s)-centered and based on assessment, consider patient partnership in all interventions
    ii. Refer to specialty including but not limited to:
        1. Cardiology
        2. Endocrinology
        3. Genetics
        4. Neonatology
        5. Perinatology
        6. Oncology
        7. Psychiatry
        8. Surgery
    iii. Referral to community resources including but not limited to:
        1. Lactation consultant
        2. Registered dietician
        3. Social work

44. Clinical Therapeutics: Identify pharmacology and pharmacotherapeutics, fluid and electrolyte management
    i. Act on laboratory testing to correct imbalances
    ii. Understand mode of pharmacologic degradation and dosage adjustment necessary in renal or hepatic insufficiency
    iii. Attention to drug interactions and harms reduction
    iv. Recognize pharmacologic categories and associated fetal risk including teratogenesis

45. Health Maintenance: Select screening, counseling on preventable diseases, communicable diseases, immunization schedules, and healthy lifestyles; impacts of stress, aging, environment, abuse and resources.
    i. Identify issues related to maternal-fetal health, initiate appropriate referrals to maximize community resource
        1. Screen for depression and suicidality and initiate appropriate counseling
    ii. Utilize wide range of agency standards including but not limited to the American College of Obstetrics and Gynecology and the Centers for Disease Control and Prevention to maintain the highest standards of care
    iii. Screen for domestic violence, sexual assault, and provide community resources
    iv. Maintain scheduled immunizations to promote community health and well-being

Person-Centered Care that includes Clinical and Technical Skills and Clinical Reasoning

In the practice of Women's Health, the PA student is expected to improve proficiency with patient-specific evaluation that considers accessibility, disability, and health equity.
Students will be evaluated based on the following:

k. Develop management plans that prioritize clinical interventions based on patient acuity, including the ordering and interpretation of appropriate diagnostic testing including but not limited to
    vi. Laboratory testing
        1. α-fetoprotein test
        2. β-HCG
        3. Cervical cytology
        4. FSH/LH levels
        5. HIV testing
        6. High risk HPV testing
        7. Nuclear acid antibody testing for vaginitides and sexually transmitted infections
        8. OGTT (glucose tolerance test)
        9. Papanicolaou smear cytology
        10. Rhesus factor and antibody screening
        11. Rubella antibody screening
        12. Wet mount
    vii. Imaging

1. Mammography
2. MR

viii. Ultrasonography
1. Breast
2. Fetal
3. Pelvic
a. Transabdominal
b. Transvaginal

l. Demonstrate ability to recognize the difference between acute, emergent, and routine care of common gynecologic and obstetric conditions with preceptor supervision.
xi. Evaluation
xii. Stabilization
xiii. Referral

m. Gather a thorough, problem-focused medical history in an unbiased and emotionally intelligent manner that adjusts according to barriers such as fluency or health literacy.
i. Gather information from the patient, or caregiver if applicable, including a partner, or health proxy
1. Menstrual history including date of last menstrual period to estimate the date of delivery in the case of pregnancy
2. Method of contraception

n. Present clear and concise patient presentations and discussions of cases.
i. Classify information in a sequential manner fully describing the presenting condition, physical exam, and clinical reasoning for selection of diagnosis and proposed treatment plan with the supervision of the preceptor

o. Perform the following common tasks and procedures, with direct preceptor supervision:
i. Evaluation and documentation, H&P, SOAP
1. Perform a thorough, problem-focused physical examination and differentiate normal from abnormal findings including but not limited to
a. Gynecologic exam
i. Breast
ii. Pelvic
iii. Rectal
b. Obstetric exam
i. Auscultation of fetal heart rate

ii. Cervical exam in labor (dilation, effacement, station)
iii. Determine fetal lie and presentation
iv. Leopold's maneuvers
v. Measurement of fundal height

2. Accurately document a complete or directed patient encounter specific to gynecology or obstetric including the age of the patient, current condition, and relevant co-morbid conditions
    a. All notes should be a reflection of professional integrity including appropriate characterization of presenting complaint, diagnosis and treatment plan following ethical and legal guidelines

ii. Discuss intended procedure(s) with preceptor before attempting

iii. Understands indication for procedural essentials:
1. Amniocentesis
2. Episiotomy
3. Leopold's maneuvers
4. Types of delivery (e.g. vaginal and cesarean)

xiv. Demonstrates proper technique including but not limited to
    a. Breast exam
    b. Collection of cervical samples
    c. Collection of cervical cytology

v. Document: Procedural documentation is complete:
1. Consider applicable diagnostic codes

vi. Provide Disposition, include patient education, and any necessary consultations must be clear.
1. Contraceptive method review including use, risks, benefits, and effectiveness
2. Follow-up instructions

vii. Apply the principles of patient and provider safety, healthcare quality, and minimizing medical error.

viii. Identify and respond appropriately to urgencies and emergencies in a gynecologic or obstetric setting.

ix. Apply the principles of nutrition in the management and /or prevention of disease in the gynecologic and/or obstetric setting.

x. Describe how population determinants of health impact patient outcomes including food insecurity, insurance accessibility, and community resources.

xi. Understand the work-flow unique to this clinical setting.

Interpersonal Skills, Interprofessional Collaboration, and Professionalism

In gynecologic and obstetric setting, the PA student is expected to develop communication styles that adapt to the collection of information from a patient, spouse, or health proxy, develop collaborative relationships with members of the medical team, and develop self-awareness of knowledge limitations consistent with life-long learning.

Students will be evaluated on the following:

e. Present a professional appearance when interacting with patients and peers.

i. Wear clean lab coat and ID

ii. Be sure instruments are clean to prevent communicable spread of disease

hhh. Perform duties with a professional attitude comprising such areas of attendance, reliability, personal comportment, and general demeanor.

iii. Relate and perform professionally in the working situation with other members of the healthcare team.

i. Understand the roles and responsibilities of all members of the healthcare team essential to the provision of optimal patient centered care in both the gynecologic and obstetric setting

jjj. Ask appropriate questions and show evidence of independent study to obtain further knowledge.

xii. On-going study is essential to expansion of knowledge appropriate to an effective PA

xiii. Life-long learning is a tenent of the profession

kkk. Recognize one's limitations by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.

lll. Demonstrate an ability to accept constructive criticism and develop a pattern of self-assessment and improvement.

mmm. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.

nnn. Demonstrate respect for patient rights by ensuring the patient is informed and

maintaining patient confidentiality.

ooo. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.

ppp. Demonstrate skills including flexibility, adaptability, open communication, referral, use of evidence-based practice to support decision-making and mutual goal-setting for patients with disabilities.

qqq. Provide anticipatory guidance related to sexual health, safe sex practices, contraception, and/or behaviors that may pose risk.

rrr. Appreciate the health care problems of the individual patient as well as those of the cultural community.

sss. Appreciate the physical, psychological, social and economic distress created by the health problem and social construct.

ttt. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem(s).

uuu. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.

xv. Participate fully to gain the best possible preceptor and self-directed learning experience possible.

ACADEMIC INTEGRITY

Students are expected to abide by the Weill Cornell Graduate School Code of Academic Integrity.

The Clinical Year Guidelines & Syllabus identifies Student Responsibilities & Honor Code as follows:

In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Available on the Weill Cornell Medicine Library website

Current Obstetrics and Gynecology: Diagnosis and Treatment, 12th ed., Rowan, Ashley & Nathan, McGraw Hill, 2019

Hacker and Moore's Essentials of Obstetrics and Gynecology, 6thed, Hacker, et. al., Saunders, 2015

Williams Obstetrics, 26th ed., F. Cunningham, et. al, McGraw Hill, 2022

Williams Gynecology, 4th ed., J. Schorge, et. al., McGraw Hill, 2020

*Additional Reading: May be assigned by the Directors of Clinical Education

PAS 7090 SUPERVISED CLINICAL PRACTICE – EMERGENCY MEDICINE

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

Assistant Director of Clinical Education: Shari LeFauve, MS, PA-C (email: sal2037@med.cornell.edu)

Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical course is to provide the physician assistant student with practical exposure to patients in an urban emergency room setting. This experience is designed to augment, strengthen, and refine the student's knowledge and skills learned in the didactic phase by allowing them to care for patients of all ages who present with urgent and emergent conditions. This experience provides the student with the opportunity to function as an integral member of the health care team while under the direct supervision of attending physicians, house-staff physicians, and practicing, certified physician assistants. The student will be responsible for performing directed history and physical examinations, diagnostic procedures, and contribute to the medical and surgical management while under supervision.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES

At the conclusion of the Emergency Medicine supervised clinical practical experience (SCPE), the PA student must successfully demonstrate the fund of knowledge gained while on rotation by **achieving a 70% or more on the End-of-Rotation Examination** and receipt of a **satisfactory preceptor evaluation scoring 70% or more** thus attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

43. HISTORY- Obtain an appropriate focused history that addresses the specific presenting

complaint(s) utilizing an effective and efficient exchange of information between patients and/or proxy that meet the needs of a diverse population including adaptability to communicate with patient populations of various ages, fluency, health literacy, or disability, and mindful to cultural and emotional complexity. ***[Preceptor Evaluation: 1]*** ***(*****COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

44. PHYSICAL EXAMINATION - Perform an appropriate problem-focused physical examination using clinical skills consistent with patient-centered care throughout all aspects of evaluation to include adaptive awareness of physical limitations. ***[Preceptor Evaluation: 2] (*****COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

45. CLINICAL REASONING – Provide rationale for selecting specific laboratory, radiographic, and/or other diagnostic tests such as ECG to facilitate the developing differential diagnosis that is based on data acquisition while considering urgent and/or emergent care, and adherence to the guidelines consistent with the standards of emergency care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

46. TECHNICAL SKILLS – Perform therapeutic procedures encountered in the emergency setting under direct observation of a clinical preceptor including, but not limited to, wound care and closure, splinting, administration of parenteral medications and consistent with informed consent. ***[Preceptor Evaluation: 4] (*****Patient-Centered Care, Problem-based Learning)**

47. PRESENTATION- Communicate to the preceptor and healthcare team pertinent information gathered from the patient history, physical examination and/or diagnostic procedures and testing, appropriately characterizing the presenting complaint(s), most likely diagnosis, list of differential diagnoses, treatment options, consultations, if necessary, and patient disposition. Communication should be concise, efficient, and understandable. ***[Preceptor Evaluation: 5] (*****COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

48. DOCUMENTATION - Document relevant data elements of each patient encounter in the

emergency department in a clear, concise, efficient manner in the medical record, serving as an accurate record of the encounter and clinical care provided, using precise terminology while adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6] (*****COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

49. KNOWLEDGE – Analyze clinical information that demonstrates review of literature and comprehension of an urgent and/or emergent diagnosis to include knowledge of common presentations, interventions, and treatments in the practice of emergency medicine across the lifespan. ***[Preceptor Evaluation: 7] (*****COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

50. PROFESSIONALISM – Demonstrate language and behaviors appropriate in the emergency care setting that foster an environment conducive to a collaborative team effort in providing patient-prioritized care, while demonstrating a dedication to learning while practicing self-reflection to support personal professional development. ***[Preceptor Evaluation: 8] (*****COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	SUCCESSFUL COMPLETION	
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (120) MC questions	
END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	Threshold met of Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	
DOCUMENTATION H&P (3)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥ 93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤ 69

INSTRUCTIONAL OBJECTIVES

While on the emergency medicine rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection, and ongoing improvement to adequately demonstrate the following:

Knowledge for Practice & Practice-Based Learning

During the emergency medicine SCPE the PA student is expected to apply knowledge using appropriate historical questions, perform a focused physical examination, and order and interpret diagnostic tests necessary to formulate a differential diagnosis and treatment plan in this practice setting.

Clinical presentations: PA students are expected to strengthen didactic-phase learning and be able to apply their knowledge to effectively evaluate the following signs and/or symptoms:

i. Cutaneous abscesses
ii. Abdominal pain
iii. Allergic reactions, local and systemic (anaphylaxis)
iv. Altered mental status
v. Arthralgia
vi. Back pain
vii. Burns / Smoke inhalation
viii. Chest pain
ix. Coma
x. Cough
xi. Dehydration
xii. Delirium
xiii. Depression / Suicidal ideations

xiv. Diarrhea
xv. Dislocations
xvi. Drowning
xvii. Dyspnea
xviii. Dysuria
xix. Fever
xx. Flail chest
xxi. Flank pain
xxii. Foreign bodies
xxiii. Fractures
xxiv. Frostbite / Hypothermia
xxv. Blunt and penetrating head trauma
xxvi. Blunt and penetrating thoracic trauma
xxvii. Blunt and penetrating abdominal trauma
xxviii. Headache
xxix. Hematuria
xxx. Hemoptysis
xxxi. Hemorrhage
xxxii. Human and animal bites
xxxiii. Insect stings
xxxiv. Intoxication / Withdrawal
xxxv. Jaundice
xxxvi. Lacerations
xxxvii. Loss of consciousness
xxxviii. Lower gastrointestinal bleeding
xxxix. Nausea and/or vomiting
xl. Neck pain
xli. Paresthesia
xlii. Pedal edema
xliii. Poisonings
xliv. Psychosis / Hallucinations
xlv. Rape / Sexual assault
xlvi. Rash

xlvii. Rectal bleeding
xlviii. Red eye
xlix. Seizure
l. Shock
li. Shortness of breath
lii. Sore throat
liii. Spinal cord injury
liv. Sprains / Strains
lv. Syncope
lvi. Multiple trauma
lvii. Upper GI bleeding
lviii. Urinary retention
lix. Vaginal bleeding
lx. Vertigo

46. Scientific Concepts: Explain the relevant anatomy, physiology, pathophysiology, and homeostatic compensatory mechanisms in disease states, shock, and trauma. Be familiar with credible resources to refine core knowledge thus maintaining the highest quality standard of care.

47. History Taking: Gather a patient history on the nature of the visit maintaining professionalism, compassion, and the capacity to adapt the exam to the age of the patient.
    i. Identify preferred pronouns, gender identity, and sexual orientation.
    ii. Communicate effectively with the patient, parent, or other caregiver to ensure an effective exchange of information that is focused and inclusive.
    iii. Establish the attributes of the problem noting the location, mechanism, onset, pain, provocation, palliation, quality, radiation, severity, and treatment response.
    iv. Elicit relevant past medical history noting date of diagnosis, recent intervention, and the current status.
    v. Gather surgical history, date, and outcome, when appropriate.
    vi. Obtain immunization status, when appropriate.
    vii. Update list of medications, both prescriptive and over the counter.
    viii. List all allergies, reactions, specifying medication, environmental, and food.
    ix. Quantify alcohol, tobacco, and/or recreational substances.

x. Obtain social history for assessing safety.
xi. Identify occupational/workplace hazards.
xii. Gather sexual history, past sexually transmitted infections, pregnancy including current status.
xiii. Perform a problem-specific review of systems to gain additional information to identify active conditions that may contribute to a patient's current status.

48. Physical Examination: Demonstrate situational awareness to adapt the examination to meet the needs of persons with disability.
    i. Apply historic information to guide an appropriate physical examination commensurate with the presenting complaint.
    ii. Perform an age-appropriate physical examination being mindful of limitations that necessitate adaptability of the exam.
    iii. Use instruments safely to guide a thorough examination appropriate to the presenting complaint including, but not limited to:
        1. Scale and stadiometer to gather BMI
        2. Sphygmomanometer and stethoscope for blood pressure
        3. Pulse oximeter
        4. Thermometer
        5. Otoscope
        6. Ophthalmoscope
        7. Snellen chart
        8. Stethoscope
        9. Reflex hammer

49. Diagnostic Studies: Following data acquisition, recommend a laboratory tests diagnostic approach or interpret diagnostic studies and to employ the results in developing a differential diagnosis
    i. Formulating a treatment plan based on results of laboratory, imaging, and radiological studies.
    ii. Recognize and provide rationale for ordering laboratory or diagnostic studies
    iii. Fully explain benefits and risks of testing

50. Diagnosis: Formulate a list of differential diagnoses and prioritize the most likely diagnosis(es).
    i. Distinguish between urgent and emergent presentations
    ii. Establish priority of issues identifying potentially life-threatening conditions
    iii. Provide clinical reasoning necessary to prioritize most likely diagnosis from alternative differentials
    iv. Be cognizant of limitations in medical knowledge, asking for preceptor guidance to ensure the highest quality of care

51. Clinical Interventions: Propose therapeutic procedures, treatment planning with associated counseling and education, monitoring, identifying complications.
    i. Develop a plan of intervention that is patient-centered and based on assessment, consider patient partnership in all interventions
    ii. Respond to laboratory testing to correct fluid and electrolyte imbalance
    iii. Refer for emergent consults and appropriate specialty follow-up
    iv. Refer to social work and discharge planning

52. Clinical Therapeutics: Select appropriate pharmacologic and pharmacotherapeutics considering risks and benefits of available agents
    i. Understand mode of pharmacologic degradation and dosage adjustment necessary in renal or hepatic insufficiency
    ii. Attention to drug interactions and harms reduction

53. Health Maintenance: Communicate healthy lifestyles; impacts of stress, aging, environment on the outcomes of disease. Refer for counseling or provide community resources.
    i. Recognition of risks and sequelae of communicable diseases
    ii. Screen for depression, suicidality, and potential for harm to self and others.
    iii. Initiate appropriate referrals and counseling
    iv. Screen for domestic violence and provide community resources

Person-Centered Care that includes Clinical and Technical Skills and Clinical Reasoning

In the practice of emergency medicine, the PA student is expected to improve proficiency with patient-specific evaluation that considers accessibility, disability, and health equity.

Students will be evaluated based on the following:

p. Develop management plans that prioritize clinical interventions based on patient acuity, including the ordering and interpretation of appropriate diagnostic testing including, but not limited to:
    ix. Laboratory testing
    x. Imaging studies
q. Demonstrate management of commonly encountered acute injuries such as sprains or strains, insect bites, wounds, or infections with preceptor supervision.
    xv. Hemostasis
    xvi. Stabilization
    xvii. Selection of pharmacotherapeutics appropriate to the presenting complaint
r. Perform basic life support (BLS) and/or advanced cardiac life support (ACLS) if situation warrants directed by preceptor:
    i. Airway management
    ii. Automatic external defibrillation
    iii. Cardiopulmonary resuscitation
s. Understand the clinical presentation, evaluation, and treatment for the following potentially life-threatening diagnoses:
    i. Cardiology:
        a. abdominal aortic aneurysm
        b. asystole
        c. cardiogenic and hypovolemic shock
        d. cardiac tamponade
        e. dissecting aortic aneurysm
        f. endocarditis
        g. malignant hypertension
        h. myocarditis
        i. pericarditis
        j. pericardial effusion
        k. status asthmaticus
    ii. Neurology:
        1. coma
        2. cerebral vascular accident
        3. concussion
        4. meningitis
        5. seizures
        6. subarachnoid and intracranial hemorrhage
        7. temporal arteritis
    iii. Gastroenterology:
        1. acute pancreatitis
        2. appendicitis
        3. ischemic bowel

4. large and small bowel obstruction
5. incarcerated hernia
6. Mallory – Weiss tear

iv. Renal/Genitourinary
1. acute renal failure
2. acute tubular necrosis
3. testicular torsion

v. Gynecology:
1. ectopic pregnancy,
2. eclampsia
3. labor
4. sexual assault

vi. Hematology:
1. IT P
2. Sickle cell crisis
3. Thrombocytopenia

vii. Endocrinology:
1. acute adrenal crisis
2. diabetic keto-acidosis (DKA)
3. non- ketotic hyperosmolar coma (HHS)
4. hypoglycemia
5. Myxedema coma
6. Thyroid storm/thyrotoxicosis
7. SIADH
8. Wernicke-Korsakoff syndrome

viii. Ophthalmology/Otolaryngology:
1. acute angle glaucoma
2. epiglottitis
3. facial and dental trauma
4. orbital blow-out fracture
5. penetrating foreign body
6. tonsillar abscess

ix. Psychiatric:
1. alcohol intoxication/withdrawal,
2. drug intoxication/overdosage
3. acute depression
4. psychosis
5. suicidal/homicidal ideations

x. Traumatic injuries:
1. Blunt or penetrating trauma to the body
2. head injury
3. open fractures
4. spinal cord injury

xi. Miscellaneous: Electrolyte imbalances (including sodium, potassium, calcium and magnesium)
1. acid-base disorders
2. angioedema and anaphylaxis
3. burns/chemical burns

4. domestic violence and assault
5. heatstroke/heat exhaustion
6. drowning
7. frostbite
8. overdose
9. poisoning

t. Gather a thorough, problem-focused medical history in an unbiased and emotionally intelligent manner that adjusts according to barriers such as fluency or health literacy.
    i. Gather information from a second party as in the case of a parent, child, or caregiver, or provide an interpreter
u. Present clear and concise patient presentations and discussions of cases.
    i. Classify information in a sequential manner fully describing the presenting complaint, physical exam, and clinical reasoning for selection of diagnosis and treatment plans
v. Perform the following common tasks and procedures, with direct preceptor supervision:
    i. Evaluation and documentation, H&P.
        1. Perform a thorough, problem-focused physical examination and differentiate normal from abnormal findings for all ages presenting to the emergency setting
        2. Accurately document a focused patient encounter specific to the age of the patient, nature of the issue and including co-morbid conditions
            a. All notes should be a reflection of professional integrity including appropriate characterization of presenting complaint, diagnosis and treatment plans
    ii. Discuss intended procedure such as suturing with preceptor before attempting.
    iii. Explain Procedural essentials:
        1. Understands the indications, contraindications, and complications of all procedures
        2. Demonstrates proper technique including, but not limited to,
            a. Blood glucose
            b. Immunization (Tetanus)
            c. Point of care collections
            d. Culture sampling
            e. Urinalysis
            f. Venipuncture (intravenous, phlebotomy)
    iv. Document: Ensure procedural documentation is comprehensive:

1. In the instance of suturing, provide detailed description of wound, cleansing, anesthesia, closure, and disposition
2. Appropriately select diagnosis and procedure codes

v. Provide Disposition: List any consultation, referral and/or patient education in a clear manner
1. Note management of commonly encountered injuries, wounds, or infections require instruction regarding medical or surgical follow-up
2. Specialty or primary care referral

vi. Apply the principles of patient and provider safety, healthcare quality, and minimizing medical errors

vii. Understand the work-flow unique to the emergency department setting

Interpersonal Skills, Interprofessional Collaboration, and Professionalism

In emergency medicine, the PA student is expected to develop communication styles that enable the collection of essential historical information from patients across the life span. Develop collaborative relationships with members of the medical team and develop self-awareness of knowledge limitations consistent with life-long learning.

Students will be evaluated on the following:

f. Present a professional appearance when interacting with patients and peers.
i. Wear clean lab coat and ID
ii. Be sure instruments are clean to prevent communicable spread of disease

www. Perform duties with a professional attitude comprising such areas of attendance, reliability, personal comportment, and general demeanor.

xxx. Relate and perform professionally in the working situation with other members of the healthcare team.
i. Understand the roles and responsibilities of all members of the healthcare team essential to the provision of optimal patient centered care

yyy. Ask appropriate questions and show evidence of independent study to obtain further knowledge.
viii. On-going study is essential to expansion of knowledge appropriate to an effective PA
ix. Life-long learning is a tenet of the profession

zzz. Recognize one's limits by demonstrating an openness to ask for help when

appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.

aaaa. Demonstrate an ability to accept constructive criticism and develop a pattern of self- assessment and improvement.

bbbb. Exhibit self-directed learning and seek out opportunities to actively participate in patient care.

cccc. Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.

dddd. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.

eeee. Demonstrate skills including flexibility, adaptability, open communication, referral, use of evidence-based practice to support decision-making and mutual goal-setting for patients with disabilities.

ffff. Reinforce anticipatory guidance related to car seats, seat belts, firearms, and behaviors that may pose additional risk.

gggg. Appreciate the health care problems of the individual patient as well as those of the cultural community.

hhhh. Appreciate the physical, psychologic, social and economic distress created by the health problem and social construct.

iiii. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem(s).

jjjj. Demonstrate professional relationships with colleagues, the healthcare team, and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.

kkkk. Participate fully to gain the best possible preceptor learning and self-directed learning experience possible.

ACADEMIC INTEGRITY

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Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Online access to resources available on the Weill Cornell Medicine Library website: (https://accessmedicine-mhmedical-com.ezproxy.med.cornell.edu)

Tintinalli's Emergency Medicine: A Comprehensive Study Guide, 9th ed., J. Tintinalli, ed., McGraw Hill, 2020

Current Emergency Diagnosis and Treatment, 8th ed., C. Stone and R. Humphries, McGraw Hill, 2017

Additional Reading: May be assigned by the Directors of Clinical Education

PAS 7110 SUPERVISED CLINICAL PRACTICE – BEHAVIORAL & MENTAL HEALTH

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

Assistant Director of Clinical Education: Shari LeFauve, MS, PA-C (email: sal2037@med.cornell.edu)

Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

COURSE DESCRIPTION

The purpose of this clinical course is to provide the physician assistant student with practical exposure to patients in the emergency, inpatient, and/or interactive telehealth settings. This experience provides an opportunity to recognize varied mental and behavioral diagnoses and distinguish chronic from acute conditions that may require an escalation of care. This supervised experience is designed to augment and strengthen the student's fund of knowledge and patient-centered care while refining the skills learned in the didactic phase. The student will actively function as an integral member of the psychiatric healthcare team while under the direct supervision of the attending physician or PA thus modeling professionalism, interpersonal communication, and behaviors that are key to the success of a practicing physician assistant.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

LEARNING OUTCOMES

At the conclusion of the Behavioral & Mental Health supervised clinical practical experience (SCPE), the PA student must successfully demonstrate the fund of knowledge gained while on rotation by **achieving a 70% or more on the End-of-Rotation Examination** and receipt of a **satisfactory preceptor evaluation scoring 70% or more** thus attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

51. HISTORY- Obtain a detail-oriented psychiatric history relevant to a primary visit or specific clinical complaint(s) that utilizes an effective exchange of information from a patient and/or caregiver(s) that meet the needs of a diverse population including adaptability to communicate with varied mental and emotional complexity, age, social determinants of health. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

52. PHYSICAL EXAMINATION - Perform a mental status and/or neurologic examination(s) appropriate to the presenting complaint using clinical skills consistent with patient-centered care throughout all aspects of evaluation to include adaptive awareness of varied limitations. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

53. CLINICAL REASONING - Provide a rationale for selecting and interpreting laboratory, and/or diagnostic testing such as chemistry, toxicology, and/or imaging based on data acquisition with attention given to the distinction between urgent, emergent, and chronic disease management and adherence to the guidelines consistent with the standard of care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

54. TECHNICAL SKILLS - Perform therapeutic procedures commonly encountered in a behavioral & mental health setting including but not limited to mental status examination consistent with informed consent, preceptor observation, and proficiency. ***[Preceptor Evaluation: 4]*** **(COMPETENCY: Patient-Centered Care, Problem-based Learning)**

55. PRESENTATION- Communicate pertinent information gathered from the patient and/or diagnostic testing to the preceptor that appropriately characterize the presenting complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include patient and/or caregiver(s) education related to disease, management including signs to seek emergent care in a clear and understandable manner. ***[Preceptor Evaluation: 5]*** **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

56. DOCUMENTATION - Document all elements of the patient encounter distinguishing emergent from chronic problems using the appropriate formatting of the psychiatric H&P or

SOAP note that correlates to the nature of the visit adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

57. KNOWLEDGE – Interpret clinical information that demonstrates review of the literature and comprehension of diagnosis, range of treatment options including pharmacotherapeutics and/or psychotherapy, understanding limitations that necessitate the escalation of care in circumstances that include acute life-threatening behavioral, mental health, or social situations. ***[Preceptor Evaluation: 7]*** **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

58. PROFESSIONALISM – Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn about varied psychiatric treatment modalities and includes self-reflection essential to professional development. ***[Preceptor Evaluation: 8]*** **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	**SUCCESSFUL COMPLETION**	
END-OF-ROTATION COGNITIVE KNOWLEDGE EXAM	≥70% PASS (120) MC questions	
END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	Threshold met of Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(45) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES

While on the Behavioral & Mental Health rotation, students are expected to become familiar with the instructional objectives necessary to meet course learning outcomes. Successful completion of the rotation requires attention, self-reflection and ongoing improvement to adequately demonstrate the following:

Knowledge for Practice & Practice-Based Learning

Throughout rotation, students must review the Behavioral & Mental Health list of diagnoses that are commonly encountered in this practice setting. PA students are expected to strengthen didactic-phase learning and be able to apply their knowledge to the following:

54. Clinical presentations: Summarize the natural history, and prognosis of diseases commonly encountered in a mental and behavioral setting, including but not limited to:
    - xliii. Abuse Disorders
        - a. Child
        - b. Domestic
        - c. Elder
        - d. Sexual
    - xliv. Addiction Disorders
        - a. Alcohol
        - b. Substance
    - xlv. Anxiety Disorders
        - a. Generalized anxiety
        - b. Panic
        - c. Phobias

xlvi. Bipolar disorders

xlvii. Delirium

a. Hypoactive
b. Hyperactive

xlviii. Dementia
a. Alzheimer's Disease
b. Frontotemporal
c. Lewy-body
d. Vascular

xlix. Depressive disorders
a. Major depressive
b. Dysthymia
c. Premenstrual dysphoria
d. Suicidal/homicidal ideation

l. Eating disorders
a. Anorexia nervosa
b. Bulimia nervosa

li. Impulse control disorders
a. Conduct
b. Kleptomania
c. Pyromania
d. Trichotillomania

lii. Neurodevelopmental disorders
a. Attention-deficit/hyperactivity
b. Autism spectrum

liii. Obsessive-compulsive disorders

liv. Personality disorders
a. Anti-social
b. Borderline
c. Narcissistic

lv. Schizophrenia and psychotic disorders

lvi. Sleep-wake disorders
a. Narcolepsy
b. insomnia

lvii. Somatic symptom and related disorders

lviii. Trauma-related disorders

a. Adjustment
b. Acute stress
c. Post-traumatic stress

55. Scientific Concepts: Explain the anatomy, physiology, pathophysiology, biochemistry, microbiology, genetic, and molecular mechanisms of mental health versus disease. Be familiar with credible resources to refine core knowledge thus maintaining the highest quality standard of care of mental health awareness, health promotion, and disease prevention.
56. History Taking: Gather a detail-focused psychiatric history depending on the nature of the visit maintaining professionalism, compassion, and the capacity to adapt to the age and current status of the patient.
    i. Determine the reason for the visit triaging if this is related to an acute psychiatric emergency or management of an existing diagnosis
    ii. Identify preferred pronouns, gender identity, sexual orientation
    iii. Communicate effectively with the patient, parent, or other caregiver(s) to ensure an effective exchange of information that is comprehensive and inclusive
    iv. Explore the role of genetics in psychiatric disorders
    v. Elicit comprehensive past medical history noting co-morbid conditions and current status
    vi. Gather information regarding previous psychiatric intervention(s) including admissions, group therapy, cognitive behavioral therapy, ECT, or other treatment(s)
    vii. Update a list of medications, both prescription, over the counter, and/or complementary
    viii. List all adverse drug reaction(s) including tardive dyskinesia or neuroleptic malignant syndrome
    ix. Quantify alcohol, tobacco, and/or recreational substance use
    x. Obtain comprehensive social history including domestic partner, relationship(s), children.
    xi. Learn about previous occupation(s) and current employment status and aspirational goals
57. Physical Examination: Demonstrate awareness that indicates adaptability to maintain safety of patient and the healthcare team depending on the situation

i. Apply historic information to guide an appropriate physical examination commensurate with the presenting issue(s) including a mental status examination
ii. Perform an appropriate evaluation according to the age and status of the patient being mindful of limitations that necessitate adaptability
iii. Use instruments safely to guide a thorough neurologic examination, if indicated, including, but not limited to:
    1. Reflex hammer

58. Diagnostic Studies: Recommend a diagnostic approach, or interpret laboratory studies to develop a differential diagnosis and/or formulate a treatment plan, including laboratory or imaging
    i. Recognize and provide rationale for ordering laboratory or imaging
    ii. Fully explain benefits and risks of testing
    iii. Provide patient education maintaining best practices
    iv. Be cognizant of access to care and insurance coverage that may impact testing
59. Diagnosis: Formulate a list of differential diagnoses and assess the likelihood of diagnosis.
    i. Distinguish between acute, emergent, and chronic psychiatric disorders
    ii. Triage potentially life-threatening disorders and escalate care appropriately
    iii. Provide clinical reasoning necessary to prioritize most likely diagnosis from alternative differentials
    iv. Be cognizant of limitations in medical knowledge, asking for guidance to ensure the highest quality of care
60. Clinical Interventions: Propose pharmacotherapeutic treatment(s), counseling, or other specialized interventions
    i. Develop a plan of intervention that is patient-centered and based on assessment, consider patient partnership in all interventions
    ii. Consider the legal issues associated with acute psychiatric care including patient's rights, informed consent, confidentiality, and competency.
    iii. Refer to specialty including but not limited to:
        1. Neurology
        2. Psychiatry
    iv. Referral to community resources including but not limited to:
        1. Domestic violence
        2. Social work

61. Clinical Therapeutics: Identify pharmacotherapeutics or management of chemical imbalances
    i. Act on laboratory testing to correct abnormalities
    ii. Understand mode of pharmacologic degradation and dosage adjustment necessary in renal or hepatic insufficiency
    iii. Attention to drug interactions and harms reduction
62. Health Maintenance: Establish schedule of counseling or psychiatric follow-up to maintain stability of diagnosis.
    i. Identify issues related to socioeconomic factors affecting mental health maintenance
    ii. Utilize a wide range of agency standards including but not limited to American Psychiatric Association to maintain the highest standards of care

Person-Centered Care that includes Clinical and Technical Skills and Clinical Reasoning

In the practice of Behavioral & Mental Health, the PA student is expected to improve proficiency with patient-specific evaluation that considers a wide range of social and behavioral issues that can limit accessibility, health equity, and early recognition of psychiatric disorder Students will be evaluated based on the following:

w. Demonstrate ability to recognize when life-threatening behavioral or mental health issues including violence, suicidal or homicidal ideation, major depression, or psychotic episodes require escalated level of care.
x. Development of management plans that prioritize interventions based on patient acuity, including the ordering and interpretation of appropriate diagnostic testing, or emergent management including but not limited to:
    xi. Laboratories: chemistries, toxicology
    xii. Imaging
    xiii. Stabilization
    xiv. Selection of pharmacotherapeutics appropriate to the current status
y. Gather a focused psychiatric history in an unbiased and emotionally intelligent manner that adjusts according to barriers such as fluency or health literacy.
    i. Gather information from a second party as in the case of a parent, child, or care-giver when appropriate
    ii. Identify a patient's preferred language and use an interpreter
z. Present clear and concise patient presentations and discussions of cases.

i. Classify information in a sequential manner fully describing the presenting scenario, mental status exam, and the clinical reasoning for selection of diagnosis and treatment

aa. Perform the following common tasks and procedures, with direct preceptor supervision:

i. Evaluation and documentation of a thorough psychiatric examination

1. Perform a detail-oriented examination and differentiate normal from abnormal evaluation for all ages.
    a. Well-child
    b. Adolescent
    c. Adult
    d. Geriatric
2. Accurately document a comprehensive patient encounter specific to the age of the patient, nature of the issue and including co-morbid conditions
    a. All notes should be a reflection of professional integrity including appropriate characterization of presenting complaint, diagnosis and treatment plan

ii. Discuss mental status exam or telehealth visits with preceptor before attempting

iii. Provide clear disposition, include referrals and any patient education provided

iv. Apply the principles of patient and provider safety, healthcare quality, and minimizing medical error

v. Identify and respond appropriately to urgencies and emergencies in a Behavioral & Mental Health setting

vi. Be cognizant of the patient's response to stress

vii. Apply the principles of management in a patient-centered, confidential, culturally sensitive manner in the Behavioral & Mental Health setting

viii. Describe how population determinants of health impact patient outcomes including limited access to counseling, insurance, and essential community resources

ix. Understand the work-flow unique to this setting.

x. Discuss the stigmata and impact of the psychiatric diagnosis on family life and employment

<u>Interpersonal Skills, Interprofessional Collaboration, and Professionalism</u>

In the Behavioral & Mental Health setting, the PA student is expected to develop communication styles that adapt to the collection of information from the patient, or secondarily from a parent presenting with a child, an adolescent, an adult, or a geriatric patient, develop collaborative relationships with members of the medical team, and develop self-awareness of knowledge limitations consistent with life-long learning.

Students will be evaluated on the following:

g. Present a professional appearance when interacting with patients and peers.
    i. Wear clean lab coat and ID

llll. Perform duties with a professional attitude comprising such areas of attendance, reliability, personal comportment, and general demeanor

mmmm. Be respectful and professional with patients, or designated care-giver(s)

nnnn. Demonstrate an awareness for personal safety

oooo. Relate and perform professionally in the working situation with other members of the healthcare team
    i. Understand the roles and responsibilities of all members of the healthcare team essential to the provision of optimal patient-centered care

pppp. Ask appropriate questions and show evidence of independent study to obtain further knowledge
    xi. Ongoing study is essential to expansion of knowledge appropriate to an effective PA
    xii. Lifelong learning is a tenet of the profession

qqqq. Recognize one's limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to consult with the supervising preceptor

rrrr. Demonstrate an ability to accept constructive criticism and develop a pattern of self- assessment and improvement

ssss. Exhibit self-directed learning and seek out opportunities to actively participate in patient care

tttt. Demonstrate respect for patient rights by ensuring the patient is informed and maintain patient confidentiality

uuuu. Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness

vvvv. Demonstrate skills including flexibility, adaptability, open communication,

referral, use of evidence-based practice to support decision-making and mutual goal-setting for patients with disabilities

wwww. Provide anticipatory guidance related to behaviors that may pose additional risk

xxxx. Appreciate the health care problems of the individual as influenced by community.

yyyy. Appreciate the physical, psychological, social and economic distress created by the health problem and social construct.

zzzz. Maintain the objectivity necessary to permit logical perspective, assessment, and solution of the health problem(s).

aaaaa. Demonstrate professional relationships with colleagues, the healthcare team and systems by showing respect for, and cooperation with, all colleagues, and by using medical records appropriately.

bbbbb. Participate fully to gain the best possible preceptor and self-directed learning experience possible.

ACADEMIC INTEGRITY

Students are expected to abide by the Weill Cornell Graduate School Code of Academic Integrity.

The Clinical Year Guidelines & Syllabus identifies Student Responsibilities & Honor Code as follows:

In order for students to be permitted to continue their studies at the MSHS PA Program, students must demonstrate a range of skills and abilities, such as, maturity, reliability, good judgment, a sense of responsibility and morality, sensitivity and compassion for individual needs, the ability to synthesize and apply knowledge, and evidence that they are capable of becoming safe and effective physician assistants. Students must also assume responsibility for the integrity of the content of the academic work performed and submitted, including papers, examinations, and reports.

TEXT AND MATERIALS Available on the Weill Cornell Medicine Library website

Current Diagnosis and Treatment: Psychiatry, 3rd ed. M. Ebert,McGraw Hill, 2019

First Aid for the Psychiatry Clerkship, 3rd ed. L.G. Stead et al. McGraw Hill, 2016

APA-DSM V, American Psychiatric Press, 2022

Additional Reading: May be assigned by the Directors of Clinical Education

PAS 8010 – 8050: SUPERVISED CLINICAL ELECTIVE EXPERIENCE

COURSE DIRECTORS

Director of Clinical Education: David Reed, MPH, PA-C (email: dsr2006@med.cornell.edu)

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Office hours are available weekly, or by appointment.

CREDIT HOURS 3.0

Course Description:

The purpose of this clinical rotation is to provide the physician assistant student with practical exposure to patients in the specialty setting designated, and is designed to augment, strengthen, and refine the student's knowledge and skills learned in the didactic phase by enabling them to recognize and manage acute and chronic medical conditions prevalent in the designated specialty. This clinical rotation is designed to allow students to actively participate in the care of patients with urgent and common conditions and function as an integral member of the health care team while under the direct supervision of attending physicians, house-staff physicians and physician assistants. The student will be responsible for performing comprehensive and directed histories and physical examinations, diagnostic procedures, and the medical and surgical management (under supervision) of patients.

COURSE SCHEDULE This is a four-week clinical rotation.

COURSE OFFERED Throughout the clinical phase.

GENERAL LEARNING OUTCOMES:

At the conclusion of the Elective supervised clinical practical experience (SCPE), the PA student must successfully demonstrate the fund of knowledge gained while on rotation by **achieving a 70% or more on the Specialty-Specific End-of-Rotation Examination or submitted Clinical Topic Paper** and receipt of a **satisfactory preceptor evaluation with a score of 70% or more** thus attesting to the fund of knowledge, technical and clinical reasoning skills, and attributes of professionalism as follows:

59. HISTORY- Obtain an organized and accurate history either complete and/or problem-based relevant to the clinical presentation that utilizes an effective exchange of information from a patient (and/or proxy) that meet the needs of a diverse population including adaptability to communicate with varied age, fluency, or disability, ever mindful to cultural and emotional complexity. ***[Preceptor Evaluation: 1]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

60. PHYSICAL EXAMINATION - Perform a complete and/or problem-focused physical

examination as indicated in the setting using clinical skills consistent with patient-centered care throughout all aspects of evaluation to include adaptive awareness of physical limitations. ***[Preceptor Evaluation: 2]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communications, Patient-Centered Care)**

61. CLINICAL REASONING - Provide a rationale for selecting and interpreting laboratory, and/or diagnostic testing such as ECG based on data acquisition with attention given to the distinction between urgent, emergent, and chronic disease management and adherence to the guidelines consistent with the standard of care. ***[Preceptor Evaluation: 3]*** **(COMPETENCY: Patient-Centered Care, Professionalism & Ethics)**

62. TECHNICAL SKILLS – Perform appropriate therapeutic procedures commonly encountered in the setting including, but not limited to, nasogastric tube placement, venipuncture, IV catheter placement consistent with informed consent, preceptor observation, and proficiency. ***[Preceptor Evaluation: 4]*** **(COMPETENCY: Patient-Centered Care, Problem-based Learning)**

63. PRESENTATION- Communicate pertinent information gathered from the patient, and/or diagnostic testing, to the preceptor that appropriately characterize the presenting complaint(s), most likely diagnosis, and list of differential diagnoses, and treatment options. Communication should include patient (and/or proxy) education related to disease, management, or prevention in a clear and understandable manner. ***[Preceptor Evaluation: 5]*** **(COMPETENCY: Knowledge of Practice, Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning, Society and Population Health)**

64. DOCUMENTATION - Document all elements of the patient encounter distinguishing acute from chronic problems using the appropriate formatting of H&P or SOAP note that correlates to the nature of the admission/visit adhering to the medical, legal, and ethical standards of care. ***[Preceptor Evaluation: 6]*** **(COMPETENCY: Knowledge of Practice, Interpersonal Communication, Patient-Centered Care)**

65. KNOWLEDGE – Interpret clinical information that demonstrates review of the literature and comprehension of diagnosis, range of treatment options including pharmacotherapeutics, and limitations that necessitate the escalation of care in circumstances that include acute life-threatening medical, behavioral, or chronic medical problems. ***[Preceptor Evaluation: 7]*** **(COMPETENCY: Knowledge of Practice, Person-Centered Care, Practice-based Learning)**

66. PROFESSIONALISM – Demonstrate an appropriate healthcare team collaborative interaction that demonstrates an eagerness to learn and includes self-reflection essential to professional development. ***[Preceptor Evaluation: 8]*** **(COMPETENCY: Interprofessional Collaboration, Professionalism & Ethics, Practice-based Learning)**

METHOD OF STUDENT EVALUATION

Students must complete all components of rotation or successfully remediate as required. Components are weighted and the aggregate provides the rotation grade.

Successful Acquisition of Learning Outcomes are Demonstrated by:

COMPONENTS OF ROTATION	**SUCCESSFUL COMPLETION**	
CLINICAL TOPIC PAPER	≥70% PASS Properly composed Paper	
END-OF-ROTATION PRECEPTOR EVALUATION	≥ 70% PASS (8) outcome areas are evaluated	Threshold met of Average or above for each component
MID-ROTATION FEEDBACK FORM	Submission of completed form is required Feedback from preceptor is formative	
DOCUMENTATION H&P (1) & SOAP (2)	≥ 70% PASS (3) notes are required, graded by faculty	
PATIENT & PROCEDURE LOGS	(20) logs (minimum) are required Verified and signed by the preceptor	

ROTATION GRADING: All grades are rounded to a whole number.

HONORS	≥93
HIGH PASS	83-92
PASS	70-82
FAILURE	≤69

INSTRUCTIONAL OBJECTIVES *See specialty-specific Objectives in Prism

- The student is expected to demonstrate the ability to utilize a focused and systematic approach to the diagnosis and treatment of common presenting problems.
- The student is expected to obtain a detailed focused history of the chief complaint and collect the pertinent information.
- The student is expected to perform a problem-oriented physical examination.
- The student is expected to propose the proper work up (laboratory and radiological tests) for the patient based upon the data gathered in the history and physical

examination.

- The student is expected to synthesize the information gathered in the history and physical examination and diagnostic studies to produce a concise differential diagnosis, a problem list and an effective management plan.
- The student is expected to recognize when consultation for a patient is necessary and initiate the consult.
  The student is expected to appropriately document the patient encounter in the form of a SOAP progress note.
- The student is expected to present the patient information in a concise and organized manner to the preceptor and members of the health care team.
- The student is expected to explain all aspects of the patient's condition including need for work up and treatment plan in a clear and understandable manner to the patient/family.
- The student is expected to formulate a comprehensive treatment plan and appropriate referral/follow up care and be proficient at expressing this information to the patient/family both verbally and in writing.

Knowledge Application:

The student is expected to identify and describe the appropriate historical questions, physical examination and diagnostic tests necessary to formulate a differential diagnosis for the commonly encountered problems in the specific specialty and setting. The student is expected to outline an initial management and treatment plan for such problems.

Core (Basic) Knowledge:

The student is expected to identify the signs and symptoms; review the pathophysiology and etiology of, produce a differential diagnosis for, predict the expected laboratory and diagnostic results and propose management (including pharmaceutical therapy and appropriate referral) of patients with the following problems. The student is also expected to discuss patient education information pertinent to each condition (including preventative health measures, screening protocols and complications).

In addition to familiarity with commonly encountered conditions, the student is expected to:

Define the accepted protocols for screening and/or treatments.

Identify the indications, contraindications and potential side effects for interventions and treatments.

Discuss the indications, contraindications, side effects of the commonly used medications for the disorders listed above.

Discuss the strengths and limitations of the management of patients.

Consider the importance of appropriate referral and follow up care.

Explore the patient/provider relationship within the context of longitudinal care.

Procedures:

The student is expected to observe and perform diagnostic tests/therapeutic interventions as directed by the clinical preceptor, and to describe proper procedural technique and to identify the indications and contraindications of such.

Tests:

The student is expected to interpret various diagnostic studies and to employ the results in developing a differential diagnosis and formulating a treatment plan. These tests include but are not limited to laboratory tests, radiological tests, ECGs, and diagnostic procedures.

ATTITUDINAL / BEHAVIORAL INSTRUCTIONAL OBJECTIVES:

The student is expected to:

- Present a professional appearance and attitude when interacting with patients and peers.
- Perform his/her duties with a professional attitude comprising such areas of attendance, dress code and general demeanor.
- Relate and perform professionally in the working situation with other members of the healthcare team.
- Ask appropriate questions to obtain further knowledge.
- Recognize his/her limits by demonstrating an openness to ask for help when appropriate from other people and resources for patient care and to solicit consultation with the supervising preceptor.
- Demonstrate an ability to accept constructive criticism and develop a pattern of self- assessment and improvement.
- Demonstrate having done independent outside reading regarding problems seen.
- Demonstrate respect for patient rights by ensuring the patient is informed and maintaining patient confidentiality.
- Demonstrate a general concern and sensitivity toward patients, their families, and social influences on their illness.
- Appreciate the health care problems of the individual patient as well as those of the appropriate cultural groups.
- Appreciate the physical, psychic, social and economic distress created by the health problem.
- Maintain the objectivity necessary to permit logical perspective, assessment,

and solution of the health problem.

READING ASSIGNMENTS:

Required Text: As determined by clinical preceptor.

Additional Reading: May be assigned by the Directors of Clinical Education.

APPENDIX E: Grading Calculations for PAEA End-of-Rotation Examinations

1. Student raw score obtained from PAEA, with a numerical score 300-500

2. Calculation is done to generate a Z-Score, which reflects standard deviations from mean:

   (Student numerical score-national mean)/national standard deviation

3. Z-Score is then converted to % score based on this table:

Z-Score	%		Z-Score	%		Z-Score	%
Minus 1.86 and less	64		Minus 0.09-Positive 0.2	82		1.81 - 2.0	90
Minus 1.71 - 1.85	65		0.21 - 0.4	83		2.01 - 2.2	91
Minus 1.51 - 1.7	67		0.41 - 0.6	85		2.21 - 2.5	92
Minus 1.1 - 1.5	70		0.61 - 0.8	86		2.51 - 2.8	94
Minus 0.71 - 1.0	72		0.81 - 1.0	87		2.81 - 3	95
Minus 0.51 - 0.7	74		1.0 - 1.5	88		3.1 - 3.5	96
Minus 0.31 - 0.5	76		1.51 - 1.8	89		3.51 - or greater	100
Minus 0.10 - 0.30	79						

APPENDIX F: Clinical Topic Paper Guidelines and Grading Rubric

Clinical topic papers must be done in lieu of an End-of-Rotation exam for all elective rotations.

Expectations

1. Students are expected to pick a topic that is pertinent to the elective rotation and write an original research paper.

a. The paper should incorporate the topic's relevance to the rotation.

b. The paper should include a case synopsis of a relevant patient seen during that rotation.

2. The topic could be a disease process, medical or surgical condition, medication, or procedure.

a. The Director or Assistant Director of Clinical Education should be contacted if there is any question regarding a topic choice.

3. The information presented is expected to be current.

4. Accurate and basic grammar, syntax and spelling skills should be used.

5. Any student that receives a score of less than 70 (seventy) out of 100 points will be required to submit a revised paper.

Format

1. The paper should be at minimum **5 double spaced pages in length** (not including cover pages, references, or tables/images) with one-inch margins and 12-point font.

2. References and in-text citations must be utilized using **AMA** style.

3. At least **six current references** (within the last 5 years) need to be cited from a **minimum of three different publications**.

Grading Rubric

	Score	Point value
Include a relevant case synopsis		10
Relevance of topic to clinical rotation		10
Proper use of basic grammar, syntax and spelling		10
Brief overview of appropriate background information for topic		10
Accurate and current information on topic		30
Include conclusion with reflection on experience and topic		10
AMA style for references and citations		10
5 double spaced pages in length with one-inch margins and 12-point font		5
At least 6 current references, from at least 3 different publications		5

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