

Barry and Judy Silverman
College of Pharmacy
NOVA SOUTHEASTERN UNIVERSITY

NSU
Florida

PHRC 7710 – PHRC 7780: Advanced Pharmacy Practice Experiences

Academic Year 2024 – 2025

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Advanced Pharmacy Practice Experience

Nova Southeastern University Barry and Judy Silverman College of Pharmacy Background

Mission: To educate and develop inclusive leaders in the science and practice of pharmacy who will improve health through discovery, innovation, advocacy, and the delivery of optimal patient care.

Vision: To be a preeminent College of Pharmacy that cultivates leadership, innovation, and diversity in education, practice, research, and service to advance the health and well-being of our communities.

Values: Integrity, Academic Excellence, Community, Diversity, Innovation, Opportunity, Scholarship/Research, Student Centered

Doctor of Pharmacy Curriculum Overview

To educate an entry-level PharmD practitioner that is a well-rounded, practice ready professional who can successfully contribute to the interprofessional health care team and meet the challenges of an ever-changing health care system. The progression of professional growth will be emphasized by three major concepts: re-engineered classroom instruction, early immersion of students in patient care, and creating leadership and innovation training and experiences.

Purpose of Experiential Education

The purpose of the experiential education portion of the curriculum is to provide pharmacy students with practical experience in various aspects of the profession of pharmacy. These experiences allow the student to make the connections between textbooks, laboratory knowledge, daily clinical practice and help to reinforce key concepts learned throughout didactics. Students should view each experience as an opportunity to incorporate learned didactic information into the development of the skills necessary to be a competent pharmacy practitioner.

Description of the Experiential Education APPE Curriculum

A continuum of required and elective APPEs emphasize the continuity of care and incorporate acute, chronic, and wellness-promoting direct and indirect patient-care services in outpatient and inpatient settings. Students complete 7, six-week, full-time rotation experiences in supervised pharmacy practice environments. There are four required rotation experiences including internal medicine, ambulatory care, advanced hospital, and community pharmacy, and three elective rotation experiences to meet graduation requirements.

Depending on the experiential rotation, APPEs may take place in a variety of settings to expose students to both traditional and non-traditional career opportunities within the profession. These experiential rotations integrate, apply, reinforce, and advance the knowledge, skills, attitudes, abilities, and behaviors developed in the pre-APPE curriculum and co-curricular activities to prepare students to be team and practice ready graduates. Goals of these experiences are site specific with each rotation set up as its own course with school provided and preceptor established goals, objectives, and assignments.

Academic Calendar 2024 – 2025

Term	Blocks	Dates
Winter 2023	Block 1	3/25/2024 – 5/03/2024
Summer 2024	Block 2	5/13/2024 – 6/21/2024
	Block 3	6/24/2024 – 8/02/2024
Fall 2024	Block 4	8/05/2024 – 9/13/2024
	Block 5	9/16/2024 – 10/25/2024
	Block 5	10/28/2024 – 12/06/2024
Winter Break		12/07/2024 – 1/05/2025
Winter 2024	Block 7	01/06/2025 – 02/14/2025
	Block 8	02/17/2025 – 03/28/2025
	Block 9 (if needed)	03/31/2025 – 05/09/2025

May 2025: Curricular Review- Refer to Academic Calendar for Details

Administrative Requirements for Students

Prerequisites:

1. Successful completion of all didactic and introductory pharmacy practice experience coursework. No incomplete grades are allowed in any course.
2. Successful completion of each advanced pharmacy practice experience.
 - a. To progress through each experience, students must complete each rotation with a final grade of 70 or above.
 - b. A final grade lower than 70 is considered failing. See NSU's College of Pharmacy Student Handbook for additional guidance.

Placement Information: Entry Level and Advanced Standing Students

1. Entry level and Advanced standing PharmD students in good academic standing are eligible for APPE rotations running March through the following March of their last professional year. Placements for seven experiences over an eight-block calendar with the option for one block off during the calendar year, or at the successful completion of seven straight rotation blocks.
2. All APPEs are to be completed on full time basis. Full time is a minimum of 40 hours per week, typically between the hours of 7 AM and 7 PM Monday through Friday. As patient care occurs all hours of the day, students may be asked to alter their schedules to be exposed to certain experiences. Students are expected to be flexible in attaining goals set in conjunction with their preceptor.
3. The four core required rotations are: Internal Medicine (PHRC 7710), Ambulatory Care (PHRC 7720), Advanced Hospital (PHRC 7730), and Community Pharmacy (PHRC 7740)
4. Three elective experiences are required for graduation. Elective APPEs are structured to give students the opportunity to mature professionally and secure the depth of experience to achieve specific educational outcomes.
5. APPEs may be scheduled at a student's place of employment only if the site permits this and outside of the students' normal work responsibilities.
6. The student will not be assigned to a preceptor if the student is presently working for that preceptor or is related to that preceptor.
7. No more than two APPE rotations may be taken out of Florida except for blocks offered by institutional practice sites. Out of state practice sites and preceptors must already be affiliated with an ACPE accredited College of Pharmacy (see policy for out of state experiences).
8. **All placements are subject to preceptor and site availability and may be adjusted at any time by the experiential education department.** Notification of a change in an APPE rotation or preceptor will be sent to the student at their NSU email account. Students are responsible for making sure their schedule is complete and satisfies graduation requirements.
9. Deadline for withdrawal from any APPE is 5 PM Monday of the 3rd week. No other APPE will be scheduled in that month. Any student beginning an APPE and dropping the rotation will receive a "W" or an "F" for the course depending on the student's grade at the time of dropping.
10. Students who are dropped by preceptors for behavioral or academic reasons during an APPE rotation will receive an "F" as the final rotation grade.
11. There will be NO student-initiated change in advanced pharmacy practice experience schedules. All change requests must go through the appropriate Director of Experiential Education.

PEPRx Instructions, Midterm/Final Evaluations and Grading

The PEPRx website is designed to provide tools for students, preceptors, and administrators to facilitate information gathering/distribution, communication, site assignments, grading and resources.

To access this website please use the link below:

<https://cfsecure.nova.edu/PEPrx/>

Your APPE preceptor is charged with the responsibility of evaluation and grading. The preceptor will be providing feedback, evaluating your progress, and documenting this with a formal midterm and final evaluation. Preceptors may work with other pharmacy personnel, healthcare providers, and residents to co-precept and solicit feedback on your performance.

All preceptors will use PEPRx to grade APPEs using a rubric based on the Pharmacists' Patient Care Process (PPCP) and Entrustable Professional Activities (EPAs) of a pharmacist in practice. Midterm and final evaluations are mandatory. The system allows preceptors to provide comments to the student in the areas of strength, improvement and to attest to the completion of the full 240 hours for each APPE rotation. The system calculates the midterm and final grades based on the weights of each of the seven competencies and the grading scale listed below.

Grading Metric	Grade Percentage
Exceed Expectations- I trust the learner to act independently and execute appropriate activities. The learner completes all basic and complex tasks going beyond what is required. Ready for supervision at a distance	100
Meets Expectations- I trust the learner to act with intermittent supervision available and execute appropriate activities. The learner completes basic and some complex tasks independently with minimal or no guidance	85
Needs Improvement- I trust the learner to act with direct supervision. The learner frequently requires guidance to complete basic or routine tasks	70
Below Expectations- I trust the learner to observe the activity only. The learner is unable to complete basic or routine tasks despite guidance	55
N/A or Not Yet Assessed	Not factored into grade

Students receiving a failing grade in any APPE experience must repeat that experience as soon as scheduling allows.

Weekly summaries and preceptor/site evaluations are due the Monday after the rotation finishes. Up to five points may be deducted from a final grade by the Director of Experiential Education for late or missing paperwork.

- 1 point deducted (up to 4 points) for any missing/late weekly summaries (6 due per rotation)
- 1 point deducted for missing preceptor/site evaluation

There are seven competencies that APPE rotations are graded on: Patient Care Provider, Medication Use Systems Management, Drug Information, Written and Verbal Presentations and Projects, Interprofessional Team Member, Cultural Sensitivity and Professionalism (see below):

COMPETENCY: Patient Care Provider [1]

Weight: 1.0

		Exceeds Expectations	Meets Expectations	Needs Improvement	Below Expectations	N/A or Not Yet Assessed
1.	Discusses the diagnosis, etiology and pathophysiology of disease(s)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2.	Measures a patient's vital signs and interprets the results (e.g. body temperature, pulse rate, respiration rate, and blood pressure)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3.	Collects a medical/medication history from a patient, family member or caregiver	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4.	Determines a patient's medication adherence and other medication use behaviors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5.	Reconciles a patient's medication list and communicates discrepancies to healthcare providers involved in the patient's care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6.	Synthesizes basic science and clinical information, patient history, laboratory, and physical exam data to identify problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
7.	Compiles a prioritized health-related problem list with patient-centered goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
8.	Creates and implements a therapeutic plan including endpoints following evidence-based disease management protocols	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
9.	Develops a self-care treatment plan with a patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
10.	Monitors and follows up on patient care plans, prioritizing appropriately based on patient needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
11.	Develops alternative plans based on what problems are likely to occur with the primary plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
12.	Educates a patient on a new medication, self-care or over the counter products, and/or medication adherence aid	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
13.	Provides prevention, intervention and educational strategies for individuals and communities to improve health and wellness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
14.	Performs a screening assessment to identify patients at risk for highly prevalent diseases in a population (e.g. hypertension, diabetes, depression)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
15.	Reports adverse drug events and medication errors to healthcare providers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
16.	Determines whether a patient is eligible for and has received CDC recommended immunizations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
17.	Administers and documents CDC recommended immunizations to an adult patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

COMPETENCY: Medication Use Systems Management [2]

Weight: 1.0

		Exceeds Expectations	Meets Expectations	Needs Improvement	Below Expectations	N/A or Not Yet Assessed
1.	Correctly prepares, verifies, and dispenses medications while assisting in workflow oversight	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2.	Applies state and federal regulations to the dispensing, storage and disposal of medication	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3.	Performs drug procurement procedures (e.g. ordering, purchasing and inventory control)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4.	Utilizes continuous quality improvement techniques and documentation in the medication use process	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5.	Assists in preparation for regulatory visits and inspections	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
6.	Assists a patient to acquire medication(s) with consideration to formulary and patient financial impact	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

COMPETENCY: Drug Information [3]

Weight: 1.0

		Exceeds Expectations	Meets Expectations	Needs Improvement	Below Expectations	N/A or Not Yet Assessed
1.	Retrieves and analyzes scientific literature to answer a drug information question(s) or to make a patient-specific recommendation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2.	Selects the best available resource for answering a drug related request or educational in-service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3.	Generates correct answers to questions in a timely and systematic manner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

COMPETENCY: Verbal and Written Presentations and Projects [4]						
Weight: <input type="text" value="1.0"/>						
		Exceeds Expectations	Meets Expectations	Needs Improvement	Below Expectations	N/A or Not Yet Assessed
1.	Uses appropriate verbal and nonverbal communication skills during presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2.	Delivers or creates presentations and/or projects with appropriate content and references (primary, secondary and tertiary) based on the assignment parameters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3.	Utilizes appropriate skills and technology to engage the audience for assigned projects or presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
4.	Adheres to the parameters established by the preceptor for presentation and/or project format and length	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

COMPETENCY: Interprofessional Team Member [5]						
Weight: <input type="text" value="1.0"/>						
		Exceeds Expectations	Meets Expectations	Needs Improvement	Below Expectations	N/A or Not Yet Assessed
1.	Answers questions about patients' medications or disease states in a timely manner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2.	Triage, document and communicate a patient's medication-related problem(s) to another healthcare professional	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3.	Communicates a patient case to a colleague to ensure an effective hand-off or transition of care	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

COMPETENCY: Cultural Sensitivity [6]						
Weight: <input type="text" value="1.0"/>						
		Exceeds Expectations	Meets Expectations	Needs Improvement	Below Expectations	N/A or Not Yet Assessed
1.	Demonstrates an attitude that is respectful of different patient populations and cultures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
2.	Assesses a patient's health literacy and modifies communication strategies to meet the patient's needs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

COMPETENCY: Professionalism [7]						
Weight: <input type="text" value="1.0"/> (cannot be zero)						
		Exceeds Expectations	Meets Expectations	Needs Improvement	Below Expectations	N/A or Not Yet Assessed
1.	Reports to site on time, prepares all activities and assigned responsibilities in a timely manner	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	--
2.	Displays professionalism in attire, actions, and preparedness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	--
3.	Engages in the profession of pharmacy by demonstrating a commitment to continual improvement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	--
4.	Demonstrates sensitivity to confidentiality issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	--
5.	Accommodates to change in workflow without disruption of the work schedule	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	--

Student will then see a final grade report with the % grade listed:

Calculate Final Score & Submit Score and Comments	
The following are the submitted scores per each competency:	
Competency	
Patient Care Provider [1]	
Medication Use Systems Management [2]	
Drug Information [3]	
Verbal and Written Presentations and Projects [4]	
Interprofessional Team Member [5]	
Cultural Sensitivity [6]	
Professionalism [7]	
Assessment Date: 19-Jun-2020	
REPORTED FINAL GRADE ON COMPETENCIES = 100.0%	

Preceptor and Practice Site Responsibilities

Preceptor Responsibilities

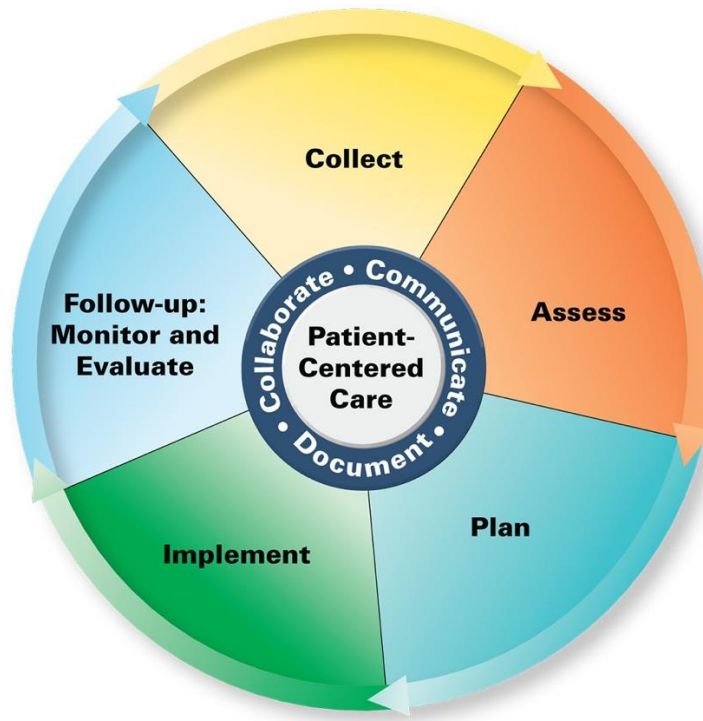
1. Preceptors must be a licensed health care professional in good standing,
2. Preceptors must abide by the laws and regulations that govern pharmacy practice.
3. Preceptors should be knowledgeable of and compliant with the material contained in this manual.
4. Preceptors are to accept the responsibility and the challenge of guiding and training the student pharmacist in areas consistent with course objectives.
5. Preceptors are expected to instill and demonstrate principles of professionalism and ethics.
6. Preceptors should demonstrate a desire and an aptitude for educating others (patients, caregivers, other health care professionals).
7. Preceptors should conduct or arrange an orientation for student(s) assigned, topics include but not limited to preceptor expectations, schedule/calendar, rotation syllabus, standard operating procedures, and expected activities for student participation.
8. Preceptors should ensure objectives of the student experience are discussed with all team members to avoid misunderstanding and conflict about the students' role.
9. Preceptors are to ensure that adequate professional experience is made available to the student pharmacist and that appropriate mentoring and supervision is provided.
10. Preceptors should supervise the student and review, in detail, expectations for the student with respect to the following: professionalism, appearance, performance, site-specific policies and procedures of prescription processes, and patient care responsibilities. Some of these responsibilities may be delegated to other qualified personnel.
11. Preceptors are responsible for identifying an acceptable replacement to supervise students during absences.
12. Preceptors need to allow adequate time for teaching, communication, feedback, and evaluation.
13. Follow the course syllabus to provide the student pharmacist with the necessary experiences and measure his or her performance against the objectives established for the course.
14. Preceptors are responsible for reviewing student progress at regular intervals during the experience and sharing their observations with the students. Critique should be in the form of constructive feedback, and should be given on an ongoing basis, conveyed in private and an appropriate manner.
15. Preceptors are responsible for fostering an environment of mutual learning, work with the student pharmacist to identify his or her strengths and areas of improvement and then attempt to tailor the experience accordingly.
16. Preceptors are responsible for submitting a midpoint and final assessment of their assigned student(s) by the prescribed due date, documenting any areas needing improvement.

Practice Site Requirements

The college strives to develop and utilize a wide variety of pharmacy practice experiential sites for student education. The following is a brief list of the characteristics the college strives for in an exemplary site:

1. Meets all state and federal laws related to the practice of pharmacy.
2. Meets all standards set by appropriate governmental, regulatory, and accrediting agencies.
3. Provides adequate patient population information based on the learning objectives for the rotation.
4. Professional staff supports involvement of students and creates an environment for the students to interact with patients in the practice environment if applicable.
5. Preceptor provides daily contact or has qualified designee to ensure quality student experience, including follow up and assessment.
6. Maintain adequate staffing during the experiential period to allow the student a rewarding and meaningful experience, and ensure that students receive proper oversight, professional guidance, and performance feedback.
7. Promote the clinical role/patient-centered care role of the pharmacist, as appropriate for the setting.
8. Provide a workspace for the student to work independently or with others.

The Pharmacists' Patient Care Process (PPCP)



Recognizing the need for a consistent process in the delivery of patient care across the profession, the Joint Commission of Pharmacy Practitioners (JCPP) released the Pharmacists' Patient Care Process. The process is applicable to any practice setting where pharmacists provide patient care and for any patient care services provided by pharmacists. The PPCP focuses on five aspects of patient care with the intent to emphasize and contemporize pharmacists' role through a comprehensive approach to collaborative patient-centered care. For pharmacists who serve as preceptors for student pharmacists, there is now an expectation that student pharmacists gain experience with the PPCP in experiential sites, so implementing the PPCP across the practice is also instrumental in preparing our students to be team and practice ready pharmacists upon graduation.

Collect

The pharmacist assures the collection of necessary subjective and objective information about the patient in order to understand the relevant medical/medication history and clinical status of the patient. Information may be gathered and verified from multiple sources, including existing patient records, the patient, and other health care professionals. This process includes collecting:

- A current medication list and medication use history for prescription and nonprescription medications, herbal products, and other dietary supplements.
- Relevant health data that may include medical history, health and wellness information, biometric test results, and physical assessment findings.
- Patient lifestyle habits, preferences and beliefs, health and functional goals, and socioeconomic factors that affect access to medications and other aspects of care.

Assess

The pharmacist assesses the information collected and analyzes the clinical effects of the patient's therapy in the context of the patient's overall health goals in order to identify and prioritize problems and achieve optimal care. This process includes assessing:

- Each medication for appropriateness, effectiveness, safety, and patient adherence.
- Health and functional status, risk factors, health data, cultural factors, health literacy, and access to medications or other aspects of care.
- Immunization status and the need for preventive care and other health care services, where appropriate.

Plan

The pharmacist develops an individualized patient-centered care plan in collaboration with other health care professionals and the patient or caregiver that is evidence-based and cost effective. This process includes establishing a care plan that:

- Addresses medication-related problems and optimizes medication therapy.
- Sets goals of therapy for achieving clinical outcomes in the context of the patient's overall health care goals and access to care.
- Engages the patient through education, empowerment, and self-management.

- Supports care continuity, including follow-up and transitions of care as appropriate.

Implement

The pharmacist implements the care plan in collaboration with other health care professionals and the patient or caregiver. During the process of implementing the care plan, the pharmacist:

- Addresses medication- and health-related problems and engages in preventive care strategies, including vaccine administration.
- Initiates, modifies, discontinues, or administers medication therapy as authorized.
- Provides education and self-management training to the patient or caregiver.
- Contributes to coordination of care, including the referral or transition of the patient to another health care professional.
- Schedules follow-up care as needed to achieve goals of therapy.

Follow-up: Monitor and Evaluate

The pharmacist monitors and evaluates the effectiveness of the care plan and modifies the plan in collaboration with other health care professionals and the patient or caregiver as needed. This process includes the continuous monitoring and evaluation of:

- Medication appropriateness, effectiveness, safety and patient adherence through available health data, biometric test results, and patient feedback.
- Clinical endpoints that contribute to the patient's overall health.
- Outcomes of care including progress toward or the achievement of goals of therapy.

Joint Commission of Pharmacy Practitioners. Pharmacists' Patient Care Process. 2014

<https://jcphp.net/wp-content/uploads/2016/03/PatientCareProcess-with-supporting-organizations.pdf>.

Boyce, E. G. (2017). The Pharmacists' patient care process and more? *American journal of pharmaceutical education*, 81(4), 1.

Core Entrustable Professional Activities (EPAs)

Entrustable Professional Activities (EPAs) are units of professional practice or descriptors of work, defined as specific tasks or responsibilities that trainees are entrusted to perform without direct supervision once they have attained sufficient competence. EPAs are independently executable, observable, and measurable in their process and outcome. Core EPAs for New Pharmacy Graduates are discrete, essential activities and tasks that all new pharmacy graduates must be able to perform without direct supervision upon entering practice or postgraduate training. These statements were labeled as "core" to denote that these EPAs are expected of all graduates independent of practice setting. They serve as a baseline, not a ceiling.

Patient Care Provider Domain:

Collect information to identify a patient's medication-related problems and health-related needs.

Example Supporting Tasks:

- Collect a medical history from a patient or caregiver.
- Collect a **medication history** from a patient or caregiver.
- Discuss a **patient's experience with medication**.
- Determine a patient's **medication adherence**.
- Use health records to determine a patient's health-related needs relevant to setting of care and the purpose of the encounter.

Analyze information to determine the effects of medication therapy, identify **medication-related problems**, and prioritize health-related needs.

- Assess a patient's signs and symptoms to determine whether the patient can be treated within the scope of practice or requires a referral.
- Measure an adult patient's **vital signs** and interpret the results (e.g., body temperature, pulse rate, respiration rate, and blood pressure).
- Interpret laboratory test results.
- Identify drug interactions.
- Perform a **comprehensive medication review (CMR)** for a patient.
- Assess a patient's health literacy using a **validated screening tool**.
- Compile a prioritized health-related problem list for a patient.
- Evaluate an existing drug therapy regimen.

Establish **patient-centered goals** and create a care plan for a patient in collaboration with the patient, caregiver(s), and other health professionals that is **evidence-based** and cost-effective.

- Follow an **evidence-based disease management** protocol.
- Develop a treatment plan with a patient.
- Manage drug interactions.
- Select monitoring parameters to determine the therapeutic and **adverse effects** related to the treatment plan.
- Determine the appropriate time interval(s) to collect monitoring data.
- Create a patient-specific education plan.

Implement a care plan in collaboration with the patient, caregivers, and other health professionals.

- Write a note that documents the findings, recommendations, and plan from a patient encounter.
- **Educate** a patient regarding the appropriate use of a new medication, **device** to administer a medication, or **self-monitoring test**.
- **Educate** a patient on the use of **medication adherence aids**.
- Assist a patient with **behavior change** (e.g., use shared decision making and motivational strategies).

Follow-up and monitor a care plan.

- Collect monitoring data at the appropriate time interval(s).
- Evaluate the selected monitoring parameters to determine the therapeutic and **adverse effects** related to the treatment plan.
- Recommend modifications or adjustments to an existing medication therapy regimen based on patient response.
- Present a patient case to a colleague during a handoff or **transition of care**.

Interprofessional Team Member Domain:

Collaborate as a member of an interprofessional team.

Example Supporting Tasks:

- Contribute medication-related expertise to the team's work.
- Explain to a patient, caregiver, or professional colleague each team member's role and responsibilities.
- Communicate a patient's **medication-related problem(s)** to another health professional.
- Use setting appropriate **communication skills** when interacting with others
- Use consensus building strategies to develop a shared plan of action.

Population Health Promoter Domain: Identify patients at risk for prevalent diseases in a population.	Example Supporting Tasks: <ul style="list-style-type: none"> • Perform a screening assessment to identify patients at risk for prevalent diseases in a population (e.g., hypertension, diabetes, depression).
Minimize adverse drug events and medication errors.	<ul style="list-style-type: none"> • Assist in the identification of underlying system-associated causes of errors. • Report adverse drug events and medication errors to stakeholders.
Maximize the appropriate use of medications in a population.	<ul style="list-style-type: none"> • Perform a medication use evaluation. • Apply cost-benefit, formulary, and/or epidemiology principles to medication-related decisions.
Ensure that patients have been immunized against vaccine-preventable diseases.	<ul style="list-style-type: none"> • Determine whether a patient is eligible for and has received CDC-recommended immunizations. • Administer and document CDC-recommended immunizations to an adult patient. • Perform basic life support.
Information Master Domain: Educate patients and professional colleagues regarding the appropriate use of medications.	Example Supporting Tasks: <ul style="list-style-type: none"> • Lead a discussion regarding a recently published research manuscript and its application to patient care. • Develop and deliver a brief (less than 1 hour) educational program regarding medication therapy to health professional(s) or lay audience.
Use evidence-based information to advance patient care.	<ul style="list-style-type: none"> • Retrieve and analyze scientific literature to make a patient-specific recommendation. • Retrieve and analyze scientific literature to answer a drug information question.
Practice Manager Domain: Oversee the pharmacy operations for an assigned work shift.	Example Supporting Tasks: <ul style="list-style-type: none"> • Implement pharmacy policies and procedures. • Supervise and coordinate the activities of pharmacy technicians and other support staff. • Assist in training pharmacy technicians and other support staff. • Assist in the evaluation of pharmacy technicians and other support staff. • Identify pharmacy service problems and/or medication safety issues. • Maintain the pharmacy inventory. • Assist in the management of a pharmacy budget. • Interpret pharmacy quality and productivity indicators using continuous improvement quality techniques. • Assist in the preparation for regulatory visits and inspections.
Fulfill a medication order.	<ul style="list-style-type: none"> • Enter patient-specific information into an electronic health or pharmacy record system. • Prepare commonly prescribed medications that require basic sterile compounding or basic non-sterile compounding prior to patient use. • Determine if a medication is contraindicated for a patient. • Identify and manage drug interactions. • Determine the patient co-pay or price for a prescription. • Ensure that formulary preferred medications are used when clinically appropriate. • Obtain authorization for a non-preferred medication when clinically appropriate. • Assist a patient to acquire medication(s) through support programs.
Self-Developer Domain: Create a written plan for continuous professional development .	Example Supporting Tasks: <ul style="list-style-type: none"> • Create and update a curriculum vitae, resume, and/or professional portfolio. • Perform a self-evaluation to identify professional strengths and weaknesses.

^a in compliance with federal, state and local laws and regulations

^b all words or phrases in bold are defined in the glossary

APPE Block Scheduling

Students have an opportunity to complete some APPEs with consecutive scheduling at one practice site or within one health system. These APPE blocks range from two to seven-month blocks and include core required rotations and elective experiences as well. Some practice sites incorporate long-term and group projects/research as part of the experience. Select health system sites have a required application, interview, and/or a minimum grade requirement. Prior to APPE scheduling, students will receive information from the Office of Experiential Education regarding sites participating in block scheduling for their academic year. This information, including the block scheduling ranking form, will be posted in Canvas.

Block rotations are optional but RECOMMENDED.

Benefits of block scheduling include limiting pre-APPE paperwork requirements and time spent on orientation to site policies and procedures. It also provides students the opportunity to have more comprehensive experiences with increased patient care responsibilities.

Policy on out of Florida APPE Experiences

Students may take approved rotation experiences outside of the state of Florida. All Core APPEs must be completed in the United States, but elective APPE rotations can be taken Internationally.

Students interested in out of state rotations should contact the Experiential Education office in August of their P3 year.

No more than two APPE rotations may be taken out of Florida except for blocks offered by institutional practice sites. Other exceptions to this are Indian Health Services sites (IHS) and Public Health Service sites (PHS).

Out of state practice sites and preceptors must already be affiliated with an ACPE accredited College of Pharmacy (see policy for out of state experiences) and must meet the preceptor and site requirements stated in this APPE manual.

Students that select an out of state rotation will not be able to drop the out of state rotation(s) once APPE schedules are finalized.

The Department of Experiential Education must have all relevant documents (affiliation agreement, syllabus/rotation calendar, preceptor application, preceptor availability and licenses).

Student Introduction Worksheet

This document should be filled out by the student prior to starting a rotation with you. It is meant to help open the lines of communication between you and the student and to set up proper expectations for the experience. Please take a moment to ask the student for this on the first day and discuss it with them.

Student Name: _____

Student Email: _____

Student Phone Number: _____

If this is a new site and/or a new preceptor you haven't worked with in the past, please describe your pharmacy work history (if you have not worked in a pharmacy before, please indicate that.)

My personal, specific, measurable goals for this rotation are:

- 1.
- 2.
- 3.

Why did you choose this rotation and what do you expect to gain from this rotation?

What are your goals post-graduation? (Signed offers with community pharmacy, residency, specialty fields, etc.)

Student Orientation Checklist

- What should the student call you?
- What name does the student prefer to be called?
- Where should the student store their belongings?
- Where should the student park?
- Does the student need a badge?
- Provide a tour of the pharmacy/institution
- Does the student need to bring a laptop/iPad?
- Policy on breaks/meals, if applicable (can the student purchase a meal on site? If not, is the student permitted to leave the site to purchase a meal? Where can they eat a meal if they pack for themselves?)
- What is your policy on cell phones/handheld devices as drug information references?
 - If the use of cellphones is prohibited what resources are available for students to consult when drug questions arise from patients, nursing staff, physicians, etc.
- Discuss site-specific policies and procedures. Are there policies that go above and beyond the NSU absence/tardiness policy, dress code, patient confidentiality policy, etc.? If so, please outline your policies for the students.
- Orient the student to the computer/telephone system and your expectation of student responsibilities regarding these technologies.
- Provide an overview of the unit workflow, introduce students to physicians, residents, etc.
- Put together a schedule
 - Project due dates, topic discussions, etc.
- Set clear time parameters along with sufficient time for feedback and mentoring.

Student APPE Checklist

- Complete VECHS waiver Agreement and Statement & upload to My Record Tracker
- Verify that all immunizations are up to date through My Record Tracker
- Complete annual renewal for flu vaccine and tuberculosis screenings (ppd skin test or QuantiFERON-TB Gold blood test/Chest X-Ray).
- Complete biannual CPR renewal - upload to PEPRx once complete.
- Complete any required Drug test, fingerprinting or background checks at least 60 days before rotation start
- Contact your preceptor at least 30 days prior to the scheduled first day of rotation
 - Ensure to ask basic information (scheduled hours for first day, required attire, specifications on where to park and best mode of contact for preceptor)
- If taking an APPE rotation out of state, ask if an intern license will be required for that state, complete the paperwork well ahead of time on the state's board of pharmacy website
- Ensure that you have your student ID & CPR card (as you will need to wear it daily while on rotation)
- Begin working on site required paperwork at least 60 days prior to the start date of rotation
- Assess outstanding time commitments that could interfere with your rotations? (Ex: work, residency interviews, family obligations, medical conditions, etc.)
 - Students must plan around preceptor/site required hours, projects, and expectations
- Map out the site and prepare adequately for traffic; if possible, try driving to the site at the same time of day before your rotation starts.
- Conduct yourself with professionalism (treat every rotation as a job interview).
- Remember that you are a representative of NSU and should act accordingly.
- Start a "residency review" using ASHP and other resources and be strategic with networking utilize your preceptors to your advantage. Establish professional working relationships early and ask for letters of recommendation whenever possible.
 - Research due dates for residency application in PhORCAS
 - Read books on how to get the residency – many free ones available to download from AccessPharmacy or the HPD Library
 - Update/Finalize your CV
 - Develop a letter of intent that can be personalized to each site you will be applying to
 - Schedule practice interviews with preceptors/faculty/mentors or attend those hosted by NSU campus organizations
 - Decide whether you will be attending the FSHP Annual Meeting, ASHP Midyear or both and \$\$\$
 - Request final transcripts before university closes for Winter Holiday – this date will be before your residency application is due so BEWARE...and prepare early!
- Submit 6 weekly summaries and a final preceptor evaluation in PEPRx by the Monday after EACH APPE rotation finishes

- ❑ Review any materials that will help you with your upcoming rotation (ex. Established guidelines, protocols, etc.) Ask your preceptor for suggested readings/materials for review
- ❑ Keep up with the NSU Capstone Course/NAPLEX and MPJE law material and all mandatory tests

Sample Project List

****Students: Please ask your preceptor to specify any formatting preferences (citations, flow of patient case presentations, etc.) or site-specific forms that should be used with adequate time to prep sufficiently before declared due date.**

- Student types a list of five (5) non-controlled prescription medications and five (5) controlled substances (generic and trade name) that were seen during experience. For each medication list the therapeutic class, mechanism of action and most common side effects.
- Student types a list of ten (10) over-the-counter medications (generic and common trade names) that were seen during the experience. For each OTC medication list the most common indications, mechanism of action, and major counseling points
- Student documents six (6) drug therapy interventions made by themselves, a pharmacist or another health professional and describes the rationale for the changes.
- 5- minute teaching moments
- Newsletters
- Drug of the week
- Brown bag sessions
- Develop staff competencies
- Community outreach (contraception lectures, geriatric patient assistance, care-giver assistance, patient support groups)
- Run experiential session for students in lower classes
- Update protocols
- Medication reconciliation
- Medication safety/analysis reports
- MUE
- P&T projects
- Formulary update
- Joint Commission Patient Safety Goals
- Pharmacist, Technician, Intern & other healthcare professional training modules
- Patient case presentations
- Nursing In-service presentations
- Topic Discussions
- Journal Club
- New formulary agent overviews

What Makes a Rotation Memorable?

- When a preceptor communicates his/her expectations from the start
- Having a schedule/plan in place from the start that a student has input in
- Preceptors who are open to questions and give ongoing constructive feedback
- Asking students what their interests are or what areas they feel like they are weak in and try to expose the student to those areas
- Tailoring the rotation to the student's specific goals such as residency with extra practice honing-in on interviewing skills, providing a CV review, or assigning projects that can be presented at national conferences, etc.
- Have student share the thorn/rose of the day (activity/part they liked the most and the part they disliked the most), this allows for open communication about the workflow, areas of interest and allows for the student to ask questions about areas they felt uncomfortable in or less prepared in
- Allowing students to experience things outside of pharmacy such as shadowing another healthcare professional, watching a surgery, etc.
- Welcoming the student as part of the pharmacy team for the six weeks they will be on rotation
- Being flexible with the students limited time on rotation and maximizing the most of it to be beneficial to both the student and site
- Motivating the student to achieve bigger and better goals
- Utilizing student pharmacists to their full potential and not treating them as just another technician

Summary of APPE Paperwork

PRE-EXPERIENCE TIMELINE AND CHECKLIST

Eight (8) weeks before...

- ✓ Did I review site requirements and info in PEPRx to schedule on-site orientation (if needed)?
As site requirements change frequently, it is important for student pharmacists to check for updates to site information in PEPRx. Many sites require urine drug screens, special paperwork, etc. and all documentation to be sent to the site at least four weeks prior to your first day on the site. Paperwork deemed by the site to be late or incomplete may result in the student being dismissed from the site or missing days at their assigned location. **Students being dismissed from their site will not be reassigned to a new location in the same block.**

Six (6) weeks before...

- ✓ Did I update my curriculum vitae in PEPRx to include all prior completed experiences, listing projects and presentations?
- ✓ Did I verify the need for updated Level 1 or Level 2 background check, urine drug screen, and PPD for those sites that require testing more often than yearly? **Students being dismissed from their site will not be reassigned to a new location.**
- ✓ Have I uploaded all necessary documentation to MyRecordTracker to complete my attestation form (if necessary)?
- ✓ Have I completed additional site-specific documentation and/or training (if necessary)?

Four (4) weeks before...

- ✓ Did I update my curriculum vitae in PEPRx to include all prior completed experiences, listing projects and presentations?
- ✓ Did I mail my next preceptor my CV and letter of introduction?
- ✓ Did I email my next preceptor to ask about readings prior to starting experience, parking, reference material needed, syllabus, calendar, etc.?

One to three (1-3) days before...

- ✓ Did I update my curriculum vitae in PEPRx to include all prior completed experiences, listing projects and presentations?
- ✓ Did I review the goals and objectives listed in the IPPE Manual and course syllabus?
- ✓ Did I prepare a wish list of activities for my experience to discuss with my preceptor?
- ✓ Do I have enough copies of additional forms that may need to be copied from the originals in this manual?
- ✓ Did I do a drive by to my assigned site before the scheduled 1st day?
- ✓ Did I turn in my paperwork and complete the online preceptor assessment form from my last experience, if applicable?

What happens if I cannot get in contact with my preceptor?

- Try again with multiple forms of communication (email, phone, etc.)
- Ask to speak with his/her designee
- Contact the appropriate Director of Experiential Education for additional assistance

All required documentation for each experience must be submitted by the Monday after the rotation finishes. These reports will be the main form of communication you will have with the Experiential Education Department and serve as a means of assessing your progress. All reports are strictly confidential. Preceptor evaluations are anonymous and are released to preceptors in May after all APPE rotations are completed.

List of Required Documentation:

- a. Experience Activities Summary forms are to be completed on a weekly basis. Your activities, experiences, and projects should be summarized. The completed forms should be submitted using the Course Drop-Off Box link available on PEPRx. The Experiential Education Director of your assigned campus will access these to provide you with your paperwork points.
- b. Midpoint Evaluations are intended to help guide you and your preceptor toward attainment of course goals and objectives. It is mandatory that your preceptor completes a Midpoint Evaluation in PEPRx. By reviewing your progress at the three-week interval, you can optimize the remaining time on your experience and focus on those areas identified as needing more experience or exposure. This is also your opportunity to let your preceptor know if there were any additional experiences you would like to gain before the end of the APPE.
- c. A Final Student Evaluation must be completed in PEPRx by the preceptor.
- d. Complete a Preceptor/Site Evaluation Form in PEPRx end of each experience. We encourage you to be honest. The Preceptor Evaluations will only be released to preceptors once a year and are completely anonymous.
- e. Certification of Experience Hours Forms. ****All introductory and advanced experience hours must be logged and summarized on the Certification of Experience Hours forms. **These hours are required for graduation** and will be used for board applications to other states. If the student is planning to obtain a pharmacy license in a state other than Florida, it is the responsibility of the student to obtain the necessary information to ensure pharmacy licensure in the desired state. Please make sure if you plan to practice in Puerto Rico, you have at least three originals.
- f. APPE Skills Checklists for the four core APPE rotations- Internal Medicine, Ambulatory Care, Advanced Hospital, and Community Pharmacy. During the first week of a core APPE rotation, the student should review the checklist with their preceptor to ensure all required activities, projects, and artifacts will be completed on the 6-week rotation. Students are responsible for uploading the checklists as one packet under the Coursework Drop Off Box in PEPRx upon completion of the four core APPE rotations during their P4 year.

Timetable for Completing and Submitting Required Forms

Form	Form is Completed	Form is Submitted
Experience Activity Summary	Weekly during the APPE rotation. All summaries are due by the Monday after the rotation finishes	Student submits in PEPRx
Midpoint Evaluation	At the end of week 3 of the 6-week APPE rotation	Preceptor submits in PEPRx
Final Evaluation	At the end of the 6-week APPE rotation	Preceptor submits in PEPRx
Preceptor/Site Evaluation	Due by the Monday after the rotation finishes	Student submits in PEPRx
Certification of Experience Hours Form	At the end of all APPE rotation experiences	Student submits in PEPRx
APPE Skills Checklist- IM, AmbCare, Adv Hospital, Community Pharmacy	At the end of APPE rotation experiences	Student submits in PEPRx

CERTIFICATION OF EXPERIENCE HOURS FORM- REQUIRED ENTRY LEVEL/INTERNATIONAL ADVANCED STANDING

Student Name _____ **Intern License Number** _____

Internal Medicine Site:	Week 1 Hours	Week 2 Hours	Week 3 Hours	Week 4 Hours	Week 5 Hours	Week 6 Hours	Total Hours	Preceptor's Signature certifying total hours	License Number
Dates:							240		
Ambulatory Care Site:	Week 1 Hours	Week 2 Hours	Week 3 Hours	Week 4 Hours	Week 5 Hours	Week 6 Hours	Total Hours	Preceptor's Signature certifying total hours	License Number
Dates:							240		
Advanced Hospital Site:	Week 1 Hours	Week 2 Hours	Week 3 Hours	Week 4 Hours	Week 5 Hours	Week 6 Hours	Total Hours	Preceptors Signature certifying total hours	License Number
Dates:							240		
Community Pharmacy Site:	Week 1 Hours	Week 2 Hours	Week 3 Hours	Week 4 Hours	Week 5 Hours	Week 6 Hours	Total Hours	Preceptors Signature certifying total Hours	License Number
Dates:							240		
Elective I Site:	Week 1 Hours	Week 2 Hours	Week 3 Hours	Week 4 Hours	Week 5 Hours	Week 6 Hours	Total Hours	Preceptors Signature certifying total Hours	License Number
Dates:							240		
Elective II Site:	Week 1 Hours	Week 2 Hours	Week 3 Hours	Week 4 Hours	Week 5 Hours	Week 6 Hours	Total Hours	Preceptors Signature certifying total Hours	License Number
Dates:							240		
Elective III Site:	Week 1 Hours	Week 2 Hours	Week 3 Hours	Week 4 Hours	Week 5 Hours	Week 6 Hours	Total Hours	Preceptors Signature certifying total Hours	License Number
Dates:							240		
Elective IV Site:	Week 1 Hours	Week 2 Hours	Week 3 Hours	Week 4 Hours	Week 5 Hours	Week 6 Hours	Total Hours	Preceptors Signature certifying total Hours	License Number
Dates:							240		

I certify that the total hours for each experience are correct and were completed under the supervision and/or authorization of the preceptor signing for the experience.

Student Signature: _____ Date: _____

The student is responsible for accurately completing this form and maintain it for the duration of their APPE schedule. Only the original, correct and completed form will be certificate to the Board of Pharmacy for internship credit hours. Please make sure that if you plan to practice in Puerto Rico, you have at least three originals.

Patient Care and Administrative Activities Minimum Requirements: To achieve the learning objectives of the IM APPE, students must interact with patients, providers, and the healthcare team.	Preceptor Initials to Indicate Completion																																							
Participate in patient centered care activities for assigned patients with a variety of disease states. At least 50% of the following disease states/patient characteristics should be encountered as primary acute diagnosis or comorbid conditions (additional disease states other than those included on this list may be assigned by the preceptor): <table border="0" style="width: 100%; margin-top: 10px;"> <tr> <td><input type="checkbox"/> Hypertension</td> <td><input type="checkbox"/> Nausea / vomiting</td> <td><input type="checkbox"/> Seizure / epilepsy</td> </tr> <tr> <td><input type="checkbox"/> Heart Failure</td> <td><input type="checkbox"/> Cirrhosis</td> <td><input type="checkbox"/> Depression</td> </tr> <tr> <td><input type="checkbox"/> Acute coronary syndrome</td> <td><input type="checkbox"/> Viral hepatitis</td> <td><input type="checkbox"/> Substance abuse</td> </tr> <tr> <td><input type="checkbox"/> Arrhythmias</td> <td><input type="checkbox"/> Inflammatory bowel disease</td> <td><input type="checkbox"/> Anxiety</td> </tr> <tr> <td><input type="checkbox"/> Dyslipidemia</td> <td><input type="checkbox"/> COPD</td> <td><input type="checkbox"/> Altered mental status / dementia</td> </tr> <tr> <td><input type="checkbox"/> Venous thromboembolism</td> <td><input type="checkbox"/> Asthma</td> <td><input type="checkbox"/> Anemia / sickle cell anemia</td> </tr> <tr> <td><input type="checkbox"/> Stroke</td> <td><input type="checkbox"/> Acute kidney injury</td> <td><input type="checkbox"/> Thrombocytopenia</td> </tr> <tr> <td><input type="checkbox"/> Diabetes</td> <td><input type="checkbox"/> Chronic kidney disease</td> <td><input type="checkbox"/> Arthritis</td> </tr> <tr> <td><input type="checkbox"/> Diabetic ketoacidosis</td> <td><input type="checkbox"/> Pneumonia</td> <td><input type="checkbox"/> Enteral tube feeding</td> </tr> <tr> <td><input type="checkbox"/> Thyroid disorders</td> <td><input type="checkbox"/> Urinary tract infection</td> <td><input type="checkbox"/> Total parenteral nutrition</td> </tr> <tr> <td><input type="checkbox"/> Peptic ulcer disease</td> <td><input type="checkbox"/> Skin and soft tissue infection</td> <td><input type="checkbox"/> Oncology supportive care</td> </tr> <tr> <td><input type="checkbox"/> Gastrointestinal bleeding</td> <td><input type="checkbox"/> HIV/AIDS ± opportunistic infections</td> <td><input type="checkbox"/> Pregnancy or lactation</td> </tr> <tr> <td><input type="checkbox"/> Diarrhea / constipation</td> <td><input type="checkbox"/> Fungal infection</td> <td></td> </tr> </table>	<input type="checkbox"/> Hypertension	<input type="checkbox"/> Nausea / vomiting	<input type="checkbox"/> Seizure / epilepsy	<input type="checkbox"/> Heart Failure	<input type="checkbox"/> Cirrhosis	<input type="checkbox"/> Depression	<input type="checkbox"/> Acute coronary syndrome	<input type="checkbox"/> Viral hepatitis	<input type="checkbox"/> Substance abuse	<input type="checkbox"/> Arrhythmias	<input type="checkbox"/> Inflammatory bowel disease	<input type="checkbox"/> Anxiety	<input type="checkbox"/> Dyslipidemia	<input type="checkbox"/> COPD	<input type="checkbox"/> Altered mental status / dementia	<input type="checkbox"/> Venous thromboembolism	<input type="checkbox"/> Asthma	<input type="checkbox"/> Anemia / sickle cell anemia	<input type="checkbox"/> Stroke	<input type="checkbox"/> Acute kidney injury	<input type="checkbox"/> Thrombocytopenia	<input type="checkbox"/> Diabetes	<input type="checkbox"/> Chronic kidney disease	<input type="checkbox"/> Arthritis	<input type="checkbox"/> Diabetic ketoacidosis	<input type="checkbox"/> Pneumonia	<input type="checkbox"/> Enteral tube feeding	<input type="checkbox"/> Thyroid disorders	<input type="checkbox"/> Urinary tract infection	<input type="checkbox"/> Total parenteral nutrition	<input type="checkbox"/> Peptic ulcer disease	<input type="checkbox"/> Skin and soft tissue infection	<input type="checkbox"/> Oncology supportive care	<input type="checkbox"/> Gastrointestinal bleeding	<input type="checkbox"/> HIV/AIDS ± opportunistic infections	<input type="checkbox"/> Pregnancy or lactation	<input type="checkbox"/> Diarrhea / constipation	<input type="checkbox"/> Fungal infection		
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Perform patient centered care activities for all assigned patients to include: <ul style="list-style-type: none"> ▪ Review labs, signs and symptoms of disease, physical assessment, and relevant testing and procedures before or during admission to develop a foundation knowledge of the patient and disease states ▪ Evaluate the use of medications for therapeutic appropriateness, medication related problems, dose and dose adjustments, and potential for IV to PO conversion ▪ Interact with the patient by performing medication history interview, medication reconciliation, discharge counseling, and transition of care communication ▪ Interact with providers and healthcare team by communicating medication discrepancies, therapeutic and medication selection recommendations, formulary substitution, IV to PO conversion, pharmacokinetic and nutrition assessments, adverse medication reactions, and drug information 																																								
Discuss the administrative responsibilities of an internal medicine pharmacist																																								
Assessment of Patient Care Activities and Professional Development (Minimum Requirements): To document achievement of the learning objectives for the IM APPE, students are evaluated on their ability to successfully complete the following:	Preceptor Initials to Indicate Completion																																							
Create 6 patient-centered care plans <i>Care plans must incorporate at least five of the following disease states: heart failure, ACS/coronary artery disease, atrial fibrillation, COPD/asthma, infectious disease, renal disease, hepatic disease, diabetes, and stroke</i>																																								
Complete 2 written formal drug information responses using college or institutional documentation form, citing appropriate references																																								
Complete and document 5 pharmacokinetic consults																																								
Complete and document 15 IV to PO therapy conversions																																								
Complete and document 15 renal dose adjustment recommendations																																								
Complete and document 5 antibiotic therapy recommendations based on culture/lab results and/or patient status																																								
Complete and document 5 medication reconciliations including patient medication history																																								
Participate in 6 or more topic discussions (preceptor or student led) <i>Topics to include at least five of the following disease states: heart failure, ACS/coronary artery disease, atrial fibrillation, COPD/asthma, infectious disease, renal disease, hepatic disease, diabetes, and stroke</i>																																								
Prepare and present 1 journal club																																								
Prepare and present 1 formal disease state/patient case presentation																																								
Complete 1 medication error report to appropriate individuals and agencies <i>May be simulated if no opportunity available</i>																																								
Discuss and/or receive feedback from preceptor on career planning and professional development activities including CV, letter of intent, professional website, interview practice, residency/fellowship/job resource discussions, etc.																																								
Optional Requirements	Preceptor Initials to Indicate Completion																																							
Manage a patient with total parenteral nutrition (TPN)																																								
Complete an in-service to staff and healthcare professionals																																								
Participate in a multidisciplinary committee meeting (e.g., Pharmacy and Therapeutics, Infection Control, Medication Safety, Antibiotic Stewardship) and discuss role of committee and meeting proceedings with preceptor																																								
NAPLEX/MPJE review questions focused on relevant disease states such as <i>heart failure, ACS/coronary artery disease, atrial fibrillation, COPD/asthma, infectious disease, renal disease, hepatic disease, diabetes, and stroke</i>																																								

Patient Care and Administrative Activities Minimum Requirements: To achieve the learning objectives of the AmbCare APPE, students must interact with patients, providers, and the healthcare team.	Preceptor Initials to Indicate Completion																		
Participate in patient centered care activities for assigned patients with a variety of disease states. At least 50% of the following disease states/patient characteristics should be encountered (additional disease states other than those included on this list may be assigned by the preceptor): <table border="0" style="width: 100%; margin-top: 10px;"> <tr> <td><input type="checkbox"/> Hypertension</td> <td><input type="checkbox"/> COPD</td> <td><input type="checkbox"/> HIV/AIDS ± opportunistic infections</td> </tr> <tr> <td><input type="checkbox"/> Anticoagulation</td> <td><input type="checkbox"/> Asthma</td> <td><input type="checkbox"/> Hormonal contraceptives</td> </tr> <tr> <td><input type="checkbox"/> Dyslipidemia</td> <td><input type="checkbox"/> Smoking cessation</td> <td><input type="checkbox"/> Hormone replacement therapy</td> </tr> <tr> <td><input type="checkbox"/> Heart failure</td> <td><input type="checkbox"/> Obesity</td> <td><input type="checkbox"/> Benign prostatic hypertrophy</td> </tr> <tr> <td><input type="checkbox"/> Atrial fibrillation</td> <td><input type="checkbox"/> Osteoporosis</td> <td><input type="checkbox"/> Incontinence</td> </tr> <tr> <td><input type="checkbox"/> Diabetes</td> <td><input type="checkbox"/> Pain management</td> <td><input type="checkbox"/> Immunizations</td> </tr> </table>	<input type="checkbox"/> Hypertension	<input type="checkbox"/> COPD	<input type="checkbox"/> HIV/AIDS ± opportunistic infections	<input type="checkbox"/> Anticoagulation	<input type="checkbox"/> Asthma	<input type="checkbox"/> Hormonal contraceptives	<input type="checkbox"/> Dyslipidemia	<input type="checkbox"/> Smoking cessation	<input type="checkbox"/> Hormone replacement therapy	<input type="checkbox"/> Heart failure	<input type="checkbox"/> Obesity	<input type="checkbox"/> Benign prostatic hypertrophy	<input type="checkbox"/> Atrial fibrillation	<input type="checkbox"/> Osteoporosis	<input type="checkbox"/> Incontinence	<input type="checkbox"/> Diabetes	<input type="checkbox"/> Pain management	<input type="checkbox"/> Immunizations	
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<input type="checkbox"/> Heart failure	<input type="checkbox"/> Obesity	<input type="checkbox"/> Benign prostatic hypertrophy																	
<input type="checkbox"/> Atrial fibrillation	<input type="checkbox"/> Osteoporosis	<input type="checkbox"/> Incontinence																	
<input type="checkbox"/> Diabetes	<input type="checkbox"/> Pain management	<input type="checkbox"/> Immunizations																	
Perform patient centered care activities for all assigned patients to include: <ul style="list-style-type: none"> ▪ Review labs, signs and symptoms of disease, physical assessment, and relevant testing and procedures to develop a foundation knowledge of the patient and disease states ▪ Evaluate the use of medications for therapeutic appropriateness, medication related problems, identification and management of polypharmacy, and dose / dose adjustments ▪ Interact with the patient by performing medication history interview, physical assessment (as appropriate), and medication or disease state counseling ▪ Assess cultural and socioeconomic barriers of patient care including access to medications, access to appropriate healthcare professionals, and health literacy/numeracy. Assist patients with prior authorization consults, medication recommendations, patient assistance programs, and/or other means to facilitate access to care, as applicable. ▪ Interact with providers and healthcare team by observing patient visit (if available), communicating medication discrepancies, therapeutic and medication selection recommendations, adverse medication reactions, and drug information 																			
Discuss the administrative responsibilities of an ambulatory care pharmacist (e.g., quality metrics, reimbursement, pharmacist billing practices, etc.)																			
Assessment of Patient Care Activities and Professional Development (Minimum Requirements): To document achievement of the learning objectives for the AmbCare APPE, students are evaluated on their ability to successfully complete the following:	Preceptor Initials to Indicate Completion																		
Create 6 patient-centered care plans to include specific goals of therapy and endpoint monitoring <i>Care plans must incorporate at least 4 of the following disease states: diabetes, hypertension, dyslipidemia, anticoagulation, and COPD/asthma</i>																			
Perform at least 2 of the following patient assessments: <i>Blood pressure, pulse, and temperature</i> <i>Point of care tests (INR, blood glucose, etc.)</i> <i>Physical assessment (ex. diabetic foot exam)</i>																			
Provide 4 patient counseling/education sessions (individual or group) on medications, medication delivery, medical devices, health and wellness, and/or disease states (e.g., blood pressure monitor, glucometer, inhaler, insulin vial/pen, DME, immunizations, lifestyle modifications, etc.)																			
Participate in 6 or more topic discussions (preceptor or student led) <i>Topics to include at least the following disease states: diabetes, hypertension, dyslipidemia, anticoagulation, and COPD/asthma</i>																			
Prepare and present 1 journal club																			
Prepare and present 1 formal disease state/patient case presentation																			
Complete 2 written formal drug information responses using college or institutional documentation form, citing appropriate references																			
Discuss and/or receive feedback from preceptor on career planning and professional development activities including CV, letter of intent, professional website, interview practice, residency/fellowship/job resource discussions, etc.																			
Optional Requirements	Preceptor Initials to Indicate Completion																		
Evaluate a collaborative practice agreement																			
Complete an in-service to staff and healthcare professionals																			
NAPLEX/MPJE review questions focused on relevant disease states such as <i>diabetes, hypertension, dyslipidemia, anticoagulation, and COPD/asthma</i>																			

Managing Pharmacy and Clinical Operational Activities Minimum Requirements: To achieve the learning objectives of the Advanced Hospital APPE, students must interact with pharmacy staff, patients, providers, and the healthcare team in performing the following.	Preceptor Initials to Indicate Completion
Processing a Medication Order	
Non-sterile Product Medication Order (including narcotic and investigational medications)	
Review patient-specific information in an electronic health or pharmacy record	
Determine therapeutic need and factors influencing appropriate medication use	
Correctly prepare, verify, and dispense medications with pharmacist oversight	
Perform final verification with pharmacist oversight	
Perform medication reconciliation with pharmacist oversight	
Use automated and barcoding systems for safe medication dispensing and distribution	
Coordinate safe, accurate, and time-sensitive medication distribution	
Resolve problems related to medication distribution (e.g., nurse unable to locate a medication)	
Dispense investigational drugs, if possible (using appropriate storage, distribution, and record keeping requirements)	
Use order sets when filling narcotic medication orders (e.g., sedation protocol, prn order sets, etc.)	
Sterile Product Medication Order	
Discuss regulations outlined in USP <795>, <797>, and <800>	
Use the correct choice of diluent(s), packaging, labeling, infusion rate, concentration, compatibility, expiration dating, and compounding technique for safe administration of a sterile product	
Perform applicable calculations to process and prepare or shadow preparation of orders	
Select appropriate medication delivery system based on medication and patient characteristics (peripheral vs. central line, enteral vs. parenteral, pump systems, etc.)	
Use / shadow appropriate aseptic technique when compounding sterile products (demo products accepted)	
Perform final verification with pharmacist oversight	
Manage Pharmacy Operations	
Review the organizational chart for department of pharmacy and high-level organizational chart for the hospital	
Differentiate between centralized and decentralized pharmacy operations processes	
Assess storage for specific medications (e.g., immunizations, temperature excursions, items used for compounding, etc.)	
Perform drug procurement procedures (e.g., ordering, purchasing, and returns/expired medication)	
Participate in the formulary review process	
Perform cost savings initiatives including choice of therapy, formulary decisions, restriction of high-cost medications to specific disease states, and criteria for use medications	
Manage medication shortages	
Assist with unreconciled dispensed drugs, missing medications, and nursing inquiries (minimum of 2)	
Conduct a narcotic audit (waste, purchasing, discrepancy resolution, diversion management, reports, IPE meetings)	
Perform a mock audit for TJC and board of pharmacy visits using appropriate standards, rules, and/or survey tools	
Assist in management of drug costs and pharmacy budgeting	
Critique and/or contribute to pharmacy policies and procedures	
Assist in training and evaluation of pharmacy technicians and other support staff (e.g., monitoring completion of annual training requirements, creation of training materials, presentation of in-service on new procedure, etc.)	
Assist in creation of a schedule for pharmacy staff (minimum of 1)	
Discuss the administrative responsibilities of a hospital operations director	
Manage Medication and Patient Safety	
Perform oversight of automated and barcoding systems for safe medication dispensation and administration (e.g., processing, correcting medications not scanning, clinical decision support rules, etc.)	
Analyze adverse drug and medication error reporting	
Coordinate a quality assurance and patient safety meeting with the medication safety officer or committee	
Outline how technology and informatics are incorporated in acute care/hospital pharmacy practice	
Manage Clinical Pharmacy Operations	
Assist with and/or analyze a medication use evaluation; identify potential or actual medication related problems through evaluation of medication orders, cost comparisons, therapeutic interchanges, prepared medication products, and/or patient data, including suggested actions to address the issue (minimum of 1)	
Analyze the clinical pharmacy consults for a given time frame for a given area using institutional benchmarks (e.g., kinetic, nutrition, heparin, and/or pain) (minimum of 1)	
Evaluate the quality of clinical services provided using institutional benchmarks (e.g., IV to PO, antibiotic stewardship, nutrition, medication reconciliation) (minimum of 2)	
Create and/or evaluate medication order sets (minimum of 1)	
Create and/or evaluate medication use protocol (minimum of 1)	

Participate/coordinate multidisciplinary committee meetings (e.g., Pharmacy & Therapeutics, Infection Control, Medication Safety, Hospital Policy and Procedure Monthly Meetings) and discuss role of committee and meeting proceedings with preceptor (minimum of 2)	
Discuss the administrative responsibilities of a clinical coordinator	
Assessment of Activities and Professional Development (Minimum Requirements): To document achievement of the learning objectives for the Advanced Hospital APPE, students are evaluated on their ability to successfully complete the following:	Preceptor Initials to Indicate Completion
Participate in 4 or more topic discussions (preceptor or student led) <i>Suggested topics include TJC standards, ISMP safety management, management/leadership principles, pharmacy budget, etc.</i>	
Prepare and present 1 formal presentation on an administrative or operation-related topic	
Complete 2 written formal drug information responses using college or institutional documentation form, citing appropriate references	
Complete an adverse drug reaction report to appropriate individuals and agencies. (Minimum of 1; may be simulated if no opportunity available)	
Complete a medication error report to appropriate individuals and agencies (minimum of 1; may be simulated if no opportunity available)	
Conduct at least one formulary review	
Develop at least one action plan for addressing medication shortage	
Discuss and/or receive feedback from preceptor on career planning and professional development activities including CV, letter of intent, professional website, interview practice, residency/fellowship/job resource discussions, etc.	
Optional Requirements	Preceptor Initials to Indicate Completion
Demonstrate borrow/loan transfer procedures between pharmacies	
NAPLEX/MPJE review questions focused on hospital pharmacy practice, pharmacy law, commonly used drugs, and pharmacy calculations	

Patient Care and Operational Activities Minimum Requirements: To achieve the learning objectives of the Advanced Community APPE, students must interact with pharmacy staff, patients, providers, and the healthcare team in performing the following.	Preceptor Initials to Indicate Completion
Dispense Prescriptions	
Enter patient-specific information into an electronic health or pharmacy record system	
Determine therapeutic need and factors influencing appropriate medication use	
Correctly prepare, pre-verify, and dispense medications with pharmacist oversight	
Assist a patient to acquire medication(s) through a patient assistance program	
Resolve problems related to prescription insurance denials including prior authorization	
Transcribe a telephone medication order from a physician phone call or voicemail	
Transfer a prescription to another pharmacy with pharmacist oversight	
Demonstrate the process for storing, handling, and dispensing hazardous medications	
Demonstrate the process for storing, handling, and dispensing specialty medications and REMS program medications	
Perform Patient Care Services	
Perform Medication Therapy Management	
Triage and Assist with Self-Care of Nonprescription Medications: Triage a patient as appropriate to health status (e.g., refer to primary physician, emergency department, or self-care)	
Assist in the selection of appropriate over the counter medication or DME product	
Administer Immunizations: Perform immunization screening/questionnaire, administration, billing, and documentation (e.g., FL shots) Review immunization documentation for quality and completeness Identify immunization gaps (patients in need) and provide immunization recommendations	
Provide Patient Counseling	
Shadow at onsite clinic, if applicable (e.g., Minute Clinic)	
Manage Pharmacy Operations	
General Operations	
Critique and/or contribute to pharmacy policies and procedures	
Supervise pharmacy technicians and other support staff	
Manage workflow and address conflict resolution within staff	
Assist in scheduling of pharmacy staff	
Assist in training and evaluation of pharmacy technicians and other support staff (e.g., monitoring completion of annual training requirements, creation of training materials, presentation of in-service on new procedure, etc.)	
Interpret pharmacy quality and productivity using continuous improvement techniques	
Report and address quality related events (QRE)	
Participate in a mock BOP inspection	
Plan or simulate a medication safety/quality improvement plan meeting	
Participate and contribute to monthly staff meetings	
Identify workflow procedures that optimize medication use system safety	
Review standards and assist in the preparation for regulatory visits and inspections	
Identify business metrics used to evaluate performance and financial benchmarks	
Identify opportunities to advocate on behalf of patients	
Discuss the administrative responsibilities of a community pharmacist	
Inventory Control	
Perform drug procurement procedures for legend and narcotic medications (e.g., ordering, purchasing, and inventory control)	
Assess storage for specific medications (e.g., immunizations, items used for compounding, etc.)	
Manage medication shortages including action plan development and completion of all necessary paperwork	
Critique and/or contribute to medication returns process	
Critique and/or contribute to a narcotic audit including cycle count and reconciliation	
Address narcotic inventory issues and manage discrepancies	
Critique the pharmacy's process for pulling and discarding of expired medications	
Demonstrate the process for using paper DEA 222 forms	
Undergo CSOS training	
Assessment of Activities and Professional Development (Minimum Requirements): To document achievement of the learning objectives for the Advanced Community APPE, students are evaluated on their ability to successfully complete the following:	Preceptor Initials to Indicate Completion
Participate in 4 or more topic discussions (preceptor or student led) <i>Suggested topics include diabetes, COPD/asthma, tobacco cessation, point of care testing, patient adherence, OTC medications, complementary and alternative medicines, Narcan, immunizations, etc.</i>	

Prepare and present 1 formal disease state/patient case/topic presentation <i>Suggested topics include medication safety alert/initiative, new drug evaluation, disease state presentation, staff in-service, legal/regulatory update, journal club, community presentation, etc.</i>	
Complete 2 written formal drug information responses using college or institutional documentation form, citing appropriate references	
Perform 5 medication therapy management case evaluations weekly	
Provide 5 patient counseling/education sessions weekly (individual or group) regarding appropriate use of a new medication or how to use a medical device and/or self-monitoring test (e.g., first fill, blood glucose meter, automatic blood pressure machine, inhaler demonstration, etc.)	
Discuss and/or receive feedback from preceptor on career planning and professional development activities including CV, letter of intent, professional website, interview practice, residency/fellowship/job resource discussions, etc.	
Optional Requirements	Preceptor Initials to Indicate Completion
Perform patient assessments, such as: <i>Blood pressure, pulse, and temperature</i> <i>Point of care tests (INR, blood glucose, etc.)</i>	
Demonstrate borrow/loan transfer procedures between pharmacies	
NAPLEX/MPJE review questions focused on community pharmacy practice, pharmacy law, commonly used drugs, and pharmacy calculations	

Advanced Community

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 1		Orientation <ul style="list-style-type: none"> Laws Self-assessment Learn workflow Organization of inventory 	Shadowing <ul style="list-style-type: none"> Filling Data entry Doctor calls Transfers 	Shadowing <ul style="list-style-type: none"> Verification DURs Prior auths 3rd party Compounding 	Shadowing <ul style="list-style-type: none"> Ordering Inventory Records Controls MTM 	Shadowing <ul style="list-style-type: none"> Vaccinations OTCs Counseling Expired meds 	
Week 2		Topic discussion: OTCs & herbals Filling station	Data entry station Counseling with supervision	Inventory Order & put away	Vaccination day with supervision FL Shots website	Doctors calls & transfers with supervision	
Week 3		Topic discussion: Hypertension & diabetes	E-FORSCE	Pseudoephedrine and syringe sales	Journal club: topic of choice	Midpoint evaluation & self-assessment checkpoint	
Week 4		Topic discussion: Hyperlipidemia	Independent tasks: <ul style="list-style-type: none"> Dr. calls Transfers OTC 	Blood pressure & blood glucose	Vaccination day independent	MTM	
Week 5		Topic discussion: Smoking cessation & vaccines	Prior auths & pt assistance programs	Expired medications & drug recalls	Nebulizer & inhaler review	Topic Discussion: Anticoagulation	
Week 6		Topic discussion: Pregnancy & Lactation	Topic Discussion: DME Compounding Day	Self-assessment final review	NAPLEX prep topic review	Final presentation: Topic of choice Final Evaluation	

Advanced Hospital

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 1		Orientation & Self-Assessment	Shadow: Medication use systems	Shadow: Inventory management	Shadow: IV room	Shadow: Admin	
Week 2		Topic discussion: Sterile/Non-sterile	Formulary management	IPE Huddle @ 2pm	ADR Reporting	Journal club: topic of choice	
Week 3		Topic discussion: Pharmacy Law	In-service: topic of choice	Med safety Huddle @ 2pm	IV Room	Midpoint evaluation & self-assessment checkpoint	
Week 4		Topic discussion: JACHO Standards	Purchasing/inventory	Topic Discussion: Policy & Procedure Huddle @ 2pm	P&T Committee Meeting	Patient case	
Week 5		Review 3 rd party billing	In-service: topic of choice	New drug info question Huddle @ 2pm	IV room	Shadow pharmacist of choice (ie: EM, ID, Critical Care)	
Week 6		Rounding @ 8am	Purchasing/inventory	Self-assessment final review	NAPLEX prep topic review	Final presentation: Topic of choice Final Evaluation	

Internal Medicine

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 1		Orientation Self-Assessment	Shadow <ul style="list-style-type: none"> • Labs • Medications • Rounds • Follow up 	Shadow <ul style="list-style-type: none"> • Labs • Medications • Rounds • Follow up 	Shadow <ul style="list-style-type: none"> • Labs • Medications • Rounds • Follow up 	Shadow pharmacist specialty of choice (ie: ID, admin, EM)	
Week 2		Assign patients to follow & work-up with direct supervision	Topic Discussion: CAP/MRSA	Topic Discussion: Inter-professional Team Dynamics Huddle @ 2pm	In-service: topic of choice	Topic Discussion: HAP/VAP	
Week 3		Assign patients to follow & work-up with some supervision	Topic Discussion: VTE Prophylaxis	IV Room training Huddle @ 2pm	Monthly pharmacy meeting	Case presentation Midterm eval Self-Assessment checkpoint	
Week 4		Assign patients to follow & work-up with minimum supervision	Topic Discussion: STEMI/NSTEMI	JACHO overview Huddle @ 2pm	IV Room training	Journal club: topic of choice	
Week 5		Assign patients to follow & work-up with minimum supervision	Topic discussion: Antibiotic resistance	Topic Discussion: Med Safety Huddle @ 2pm	P&T Committee meeting	Shadow pharmacist specialty of choice (ie: ID, admin, EM)	
Week 6		Assign patients to follow & work-up without supervision	Topic discussion: Stroke guidelines	Self-assessment final review Huddle @ 2pm	NAPLEX prep topic review	Final evaluation & Final project: topic of choice	

Ambulatory Care

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Week 1		Orientation Self-Assessment	Shadow Clinic (insulin titrations)	Shadow Clinic (Anticoag)	Shadow chart reviews (antibiotics & polypharmacy)	SOAP Note Preparation (rough draft)	
Week 2		Shadow mental health clinic	Topic discussion: DM	Clinic	Insurance chart review	SOAP Note Presentation	
Week 3		Review charts for physician visit next day	Topic discussion: HTN/HLD	Clinic	Antimicrobial stewardship	Midpoint evaluation Self-Assessment checkpoint	
Week 4		Review charts for physician visit next day	Topic discussion: Anticoag	Clinic	Polypharmacy chart review	Journal club presentation	
Week 5		Review charts for physician visit next day	Topic discussion: HepC/HIV/ antibiotics	Clinic	Antimicrobial stewardship	SOAP Note Presentation	
Week 6		Review charts for physician visit next day	Topic discussion: Smoking cessation/ COPD/Inhalers	Self-Assessment review	NAPLEX prep topic review	Final evaluation & Final project: topic of choice	

Policy and Procedure- Student Conduct on IPPE and APPE Rotations

It is expected that students always follow NSU and Experiential site policies and rules while on rotation and display professionalism. Failure to meet this expectation may result in verbal feedback, written feedback, grade deductions, referral to Student Progress Committee, and/or failure of the rotation experience. Preceptors may contact the Office of Experiential Education at any time for assistance in addressing student conduct issues.

IPPE and APPE Failures

Successful completion of IPPE Community and IPPE Health System is required to progress to the APPE curriculum. Successful completion of the Experiential Education curriculum (all IPPEs and APPEs) is required to fulfill degree requirements. Failure of an IPPE may delay progression to APPE. Failure during IPPE or APPE may result in delayed graduation date. Students who have received a failing grade on IPPE or APPE are responsible for working with their preceptor, the Office of Experiential Education, the Associate Dean of the Professional Program, Assistant Dean of Assessment and Accreditation, Academic Support Services and the Dean, as appropriate, in their individual situation.

Policy and Procedure- IPPE and APPE Leave Requests/Course Withdrawals

NSU College of Pharmacy policies (outlined in the Student Handbook) regarding excused absences, leave of absence, and withdrawals will apply to Experiential Education courses. While enrolled in an IPPE or APPE course, a student may request an excused absence, a leave of absence or an administrative break, or request to withdraw from their course. Depending on the circumstances of the situation, this request may lead to a delayed progression to APPE and/or a delayed graduation date.

Per the NSU COP Student Handbook:

Students are responsible for contacting their preceptor, and the Office of Experiential Education, within 48 hours from the first date of an absence due to illness/hospitalization or special circumstances. Absences will require the submission of supporting documentation.

An administrative break in enrollment may be voluntary, imposed by the dean, or may occur when a student is absent for 20 percent or more of any course (including didactic and experiential).

A student requesting a voluntary administrative break in enrollment must complete the proper paperwork obtained from the Office of Student Services.

A student, who was withdrawn from pharmacy practice experiences (IPPEs or APPEs) during the administrative break in enrollment, will have to repeat all rotations in their entirety, as scheduled by the Office of Experiential Education (OEE).

A student who was not withdrawn from pharmacy practice experiences (IPPEs or APPEs) during the administrative break in enrollment, will be expected to complete any required assignments, according to a schedule determined by the OEE. Once these requirements are completed, the grade(s) of progress (PR) will be replaced with the earned grade(s).

Policy and Procedure- Positive Drug Screening

NSU has a zero-tolerance policy on illicit drug use (see NSU student handbook for the University's drug and urine drug screen policy). Students may be unable to participate in IPPE or APPE rotations if they do not pass a criminal background check and/or a drug screening. Students who are unable to complete their experiential education requirements of the Doctor of Pharmacy program cannot progress through the curriculum toward graduation.

Policy and Procedure- Site Paperwork and Attestations

Experiential Education staff and students working on site paperwork and attestation forms must start working on requirements a minimum of 60 days before the start date of the rotation (except VA sites which require a longer period for onboarding). It is the student's responsibility to review expectations for each of the sites they are assigned and for initiating contact with the appropriate Experiential Education personnel to obtain supplementary background check/drug screen forms or to receive guidance on completion of requirements.

Students must reply to email or telephone communications from the Office of Experiential Education staff regarding paperwork within 48 hours. Additionally, students must communicate with their individual preceptor at least 30 days prior to the start date of each rotation. Communication is a two-way street. If a student does not receive a reply to their initial email, they must reach out with a phone call. If a student cannot connect with their upcoming preceptor, they must let the Office of Experiential Education know at least 2 weeks before the start date of their APPE rotation.

Paperwork deemed by the site to be late or incomplete may result in the student being dismissed from the site or missing days at their assigned location. Students being dismissed from their site will NOT be reassigned to a new location during that same rotation block period.

Experiential Staff contact: COPSitePaperwork@nova.edu

***Students must check their NSU email DAILY.**

***Students must check PEPRx Site Requirements MONTHLY as these are subject to change.**

Student Resources

I. Tips for Oral Case Presentations:

A case presentation is a detailed narrative describing a specific problem experienced by one or more patients. Usually focused on the medicine aspect, for example, where there is potential harm to a patient or proven benefit to the patient from medication, or where a medication error has occurred.

The purpose of the oral case presentation is to disseminate information about a patient for the purpose of education, to update other members of the healthcare team on a patient's progress, and to ensure the best, evidence-based care is being considered for their management. Strong oral case presentations are concise summaries of a patient's presentation with the bulk of the discussion time focused on clinical reasoning and synthesis of the patient's illness script. The information provided is only the minimum essential facts required to understand the patient's current clinical circumstance.

A case presentation is NOT a simple recitation of your write-up. It is a concise, edited presentation of the most essential information. A case presentation should be memorized as much as possible by 3rd year rotations. The student can refer to notes but should not read your presentation. The length of the case presentation will vary depending on your service, but a full case presentation should be under 3 to 5 minutes.

Content of a Case presentation as a general structure maybe be divided into three phases:

- a) Reporting important patient information and clinical data
- b) Analyzing and synthesizing identified issues (where is important to include these issues)
- c) Managing the case by developing a therapeutic plan and the following information should be included:

Patient and Complaint details:

- a) Patient details: name, sex, age, ethnicity
- b) Presenting complaint: the reason the patient presented to the hospital with symptoms and/or event
- c) History of presenting complaint: highlighting relevant events in chronological order, presenting as how many days they occurred, including prior admission to the hospital for the same complaint
- d) Review of organ systems; listing positive or negative findings found from the doctor assessment that are relevant to the presenting complaint.

Past medical and surgical history:

1. Social history: including occupation, exposures, smoking and alcohol history, and any recreational drug use.
2. Medication history, including any drug allergies: this should include any prescribed medicines, medicines purchased over the counter, any topical preparations used (including eye drops, nose drops, inhalers, and nasal sprays) and any herbal or traditional remedies taken.
3. Sexual history: if this is relevant to the presenting complaint.
4. Details from a physical examination: this includes any relevant findings to the presenting complaint and should include relevant observations.
5. Laboratory investigation and imaging results: abnormal findings should be presented.

Summary:

1. Assessment: including differential diagnosis.
2. Plan: including any pharmaceutical care issues raised and how these should be resolved, ongoing management, and discharge planning.
3. Any discrepancies between the current management of the patient's conditions and evidence-based recommendations should be highlighted and reasons are given for not adhering to evidence-based medicine

II. Journal clubs have become a staple in the professional development and continuing professional education of health care practitioners across many disciplines. A literature assessment is a crucial tool to educate the health team. The primary literature is the basis for FDA clinical practice and drug approval

It's very important to read the entire article and not just the abstract, due to the abstract only is a summary of the article and it provides an overview. Focus on the methods and results, which are really the essence of the study.

a) Examine the **inclusion and exclusion criteria** and determine whether they are appropriate. Evaluate the treatment protocol to determine whether the dosing, monitoring, and follow up are appropriate. (For example, if the primary objective is to evaluate the effect of diabetes medication on hemoglobin A1c, then the study duration should be at least 3 months)

b) Evaluate whether the study used the gold standard of the **Intention to Treat (ITT) analysis**. The ITT includes all patients in the results that were randomized — even if they dropped out or failed to comply. It's considered the gold standard analysis because it tries to reflect what's actually observed in clinical practice. This is an important discussion point for the journal club.

c) **Calculate the number needed to treat (NNT)**: is the number of patients needs to treat to prevent one additional bad outcome (example: death, stroke, MI).

To calculate the NNT:

**** NNT = 1/Absolute Risk Reduction (ARR)**

The NNT is a great value to discuss during your journal club presentation

**** ARR = Control event rate-experimental event rate**

The ARR is the amount by which the therapy reduces the risk of a bad outcome

d) The results may be statistically significant, which by convention is $p < 0.05$ it is extremely important to determine the clinical significance and how it relates to the patients

Journal Club Guideline

The purpose of the journal club is to educate the student to critically evaluate the literature. Below is a helpful checklist for critique of a journal article. This is not a complete list and is to be used as a guideline. Students are urged to identify other weaknesses or strengths of the study in addition to those listed here.

Objectives/Introduction

- Are the objective(s) clearly stated?
- Is there a brief review of previous work and background on why the student was done?

Methodology

- Is the study prospective or retrospective; blinded; placebo-controlled, randomized?
- Were the inclusion/exclusion criteria clearly stated; will these affect the results?
- Were doses, schedules, and duration of drug treatment adequate and comparable?
- Were washouts used; were they of sufficient length?
- Was concurrent therapy allowed; was it controlled and detailed in the article?
- Were the outcome measures subjective or objective; were they appropriate for the desired endpoint(s)?
- How long were the subjects followed; was it long enough?
- Was the number of subjects adequate; are the groups comparable?

Statistics

- What is considered statistically significant?
- What is the power of the study?
- Are the methods appropriate for the source and nature of the data?

Results

- Were the results clearly, accurately, and adequately presented?
- Were all the findings presented?
- Were the dropouts accounted for?
- Were the results relevant to the study objective?
- What do the tables/figures show?

Discussions/Conclusions

- Does a statistically significant difference imply clinical significance?
- Were valid conclusions drawn based upon the results presented; critique the authors' conclusion, don't just list them?
- Do the authors place the results into perspective with previous trials, comparing and contrasting results; identify any additional shortcomings and critique the validity of the authors' discussion of their studies limitations?
- What is the place of the findings in current therapy; what population (if any) do they apply?

- Critique the author's conclusion if you agree or disagree and provide your own conclusion and why?

Deenadayalan, Y., Grimmer-Somers, K., Prior, M., & Kumar, S. (2008). How to run an effective journal club: a systematic review. *Journal of evaluation in clinical practice*, 14(5), 898-911.

Askew, J. P. (2004). Journal club 101 for the new practitioner: evaluation of a clinical trial. *American Journal of Health-System Pharmacy*, 61(18), 1885-1887.