

DIRECT PATIENT CARE – PATIENT CENTERED CARE

PHRC 7750 APPE: Elective I; PHRC 7760 APPE: Elective II; PHRC 7770 APPE: Elective III; PHRC 7780 APPE: Elective IV

Semester Credit Hours: 6.0

Course Management Team

Course Coordinator	Contact Information
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Course Faculty:

Faculty/Instructor	Contact Information
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Nydia Rivera Berrios, Pharm.D. Clinical Specialist – Emergency Medicine	Phone: (954) 883-7907 Email: NyRiveraBerrios@mhs.net

Class Schedule and Location

Day/Dates	Time	Location
Pre-course information		
Block 1		
Block 2		
Block 3		
Block 4	1300-2130	Memorial Hospital Pembroke 7800 Sheridan Street Pembroke Pines, FL 33024 Main Pharmacy: (954)883-8710 Pharmacy Fax: (954)883-7040
Block 5		
Block 6		
Block 7		
Block 8		

Course Description

The Direct Patient Care – Patient Centered Care Advanced Pharmacy Practice Experience (APPE) is a six-week, full time (minimum of 40 hours per week) elective rotation supervised by a licensed pharmacist(s) in an inpatient or outpatient clinical practice setting. This experience is designed to optimize students' competency in patient care, patient education, medication safety, interprofessional collaboration, and evidence-based medication management. Students apply and advance their knowledge, skills, abilities, and behaviors developed in the pre-APPE curriculum and co-curriculum through interactions with diverse patient populations and members of the health care team. They use disease-state knowledge, drug therapy guidelines and site-specific procedures to identify and prevent drug therapy problems and apply the Pharmacists' Patient Care Process (PPCP) to ensure safe medication use and optimal patient outcomes. Verbal and written communication skills are practiced through interaction with patients, their caregivers, members of the health care team and by documenting interventions in the medical record.

Learning Outcomes Curricular Outcomes: Curricular Outcomes/Entrustable Professional Activities

This course addresses the following outcomes of the Pharm.D. Curriculum.

Outcome 1 – Foundational Knowledge

1.1. Learner (Learner)

Outcome 2 – Essentials for Practice and Care

- 2.1. Patient-centered care (Caregiver)
- 2.3. Health and wellness (Promoter)
- 2.4. Population-based care (Provider)

Outcome 3 - Approach to Practice and Care

- 3.1. Problem Solving (Problem Solver)
- 3.2. Educator (Educator)
- 3.3. Patient Advocacy (Advocate)
- 3.4. Interprofessional collaboration (Collaborator)
- 3.5. Cultural sensitivity (Includer)
- 3.6. Communication (Communicator)

Outcome 4 – Personal and Professional Development

- 4.1. Self-awareness (Self-aware)
- 4.2. Leadership (Leader)
- 4.3. Innovation and Entrepreneurship (Innovator)
- 4.4. Professionalism (Professional)

This course will prepare you to perform the following pharmacist entrusted professional activities:

- Patient Care Provider
 - Collect information to identify a patient’s medication-related problems and health-related needs
 - Analyze information to determine the effects of medication therapy, identify medication-related problems, and prioritize health-related needs
 - 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
 - Implement a care plan in collaboration with the patient, caregivers, and other health professionals
 - Follow-up and monitor a care plan
- Interprofessional Team Member
 - Collaborate as a member of an interprofessional team
- Population Health Promoter
 - Identify patients at risk for prevalent diseases in a population
 - Minimize adverse drug events and medication errors
 - Maximize the appropriate use of medications in a population
- Information Master
 - Educate patients and professional colleagues regarding the appropriate use of medications
 - Use evidence-based information to advance patient care
- Practice Manager
 - Fulfill a medication order
- Self-Developer
 - Create a written plan for continuous professional development

Pharmacist Patient Care Process

This course addresses the following parts of the Pharmacists Care Process:

1. Collect
2. Assess
3. Plan
4. Implement
5. Follow-up and evaluate

Course Objectives

Upon successful completion of this course, students will be expected to:

1. Apply the Pharmacist’s Patient Care Process to provide patient-centered care in collaboration with other healthcare professionals and the patient/caregiver.
 - a. Gather subjective and objective information about the patient to understand the relevant medical and medication history and clinical status of the patient.
 - b. Assess information collected and analyze the clinical effects of the patient’s therapy to identify and prioritize problems.

- c. Create or modify an individual patient-centered therapeutic plan by using foundational knowledge of drugs, disease states, population data, evidence-based scientific and clinical information, and patient specific factors (health, social, cultural).
 - d. Implement a therapeutic care plan.
 - e. Document a therapeutic plan/recommendation in the electronic health record or similar platform.
2. Retrieve, evaluate, and apply evidence based scientific and clinical literature to address drug therapy and practice related problems.
3. Apply critical thinking and clinical reasoning when solving patient-specific and general practice problems.
4. Effectively function as part of an interprofessional team engaged in team-based care.
5. Communicate verbally and/or in writing with other healthcare professionals about patients' drug therapy problems in a succinct, organized, and accurate manner.
6. Advocate for patients to ensure their best interests are represented.
7. Communicate verbally and nonverbally with patients, families, communities, healthcare professionals and staff in a responsive, culturally sensitive, and responsible manner.
8. Provide education and/or counseling to a diverse population of patients/caregivers, health professionals and communities promoting health and wellness, adherence to medications, safe use of medicines and optimizing therapeutic outcomes.
9. Apply quality measures to ensure patient and medication safety.
10. Demonstrate ethical, and professional behaviors and attitudes when interacting with peers, staff, other healthcare professionals, and patients/caregivers.
11. Demonstrate flexibility, assertiveness, initiative, and vision when performing daily responsibilities.
12. Recognize personal deficiencies through self-evaluation and/or self-reflection and initiate actions for improvement.
13. Comply with standards of practice and federal, state, and local laws in the practice of pharmacy.
14. Outline the administrative responsibilities of a pharmacist in the practice area.

Preceptor Specific Objectives:

15. Understand the emergency room pharmacist role in the medication reconciliation process. Be able to obtain accurate patient information, and demonstrate the ability to utilize resources available (ie. Florida Prescription Drug Monitoring Program (PDMP), prescription fill databases). Describe the limitations and medication safety issues associated with this process.
16. Describe acute medical conditions that warrant emergency care.
17. Describe the emergency room pharmacist role as part of the multi-disciplinary care team.
18. Apply pharmacotherapy knowledge to emergency medicine disease states.
19. Develop treatment plans individualized to patient goals and outcomes acutely in the emergency department.
20. Understand and apply the stroke guidelines to the emergency medication treatment plan and management of an acute stroke, including ischemic and hemorrhagic.
21. Understand and apply the sepsis guidelines for the emergency medication treatment plan and management of sepsis within the emergency room setting.
22. Understand and apply medication management related to anticoagulation reversal in the emergency room setting.

Materials and Resources

Course Required Texts and Materials:

1. PEPRx profile and system access
2. APPE Manual (posted online in PEPRx)
3. Pharmacy Intern license in Florida and the jurisdiction of assigned APPE site
4. Completed HIPAA training
5. Completed Blood-borne Pathogens training
6. Proof of immunizations as outlined by HPD and individual site requirements
7. NSU library database access
8. Selected readings from the primary literature or other sources may be provided by the course coordinator/preceptor to support course goals and objectives; it is the student's responsibility to read the assigned materials according to the schedule assigned by the preceptor

Course Supplemental Materials:

1. Scientific calculator
2. Additional drug information resources (e.g. Lexi-Comp Drug Handbook, Sanford Guide, Immunization schedules, etc.)
3. Nemire, RE, Kier KL, Assa-Eley MT. Pharmacy student survival guide. 3rd ed. New York, NY. McGraw- Hill Professional; 2014: ISBN 0071828478 (Available as an E-book on Access Pharmacy through the HPD library)

Other Resources: Students must have access to a printer, and iPad/computer with internet connection, to allow them access to web resources, and to download and print course material. Canvas will be used to provide course materials and course communication. Students not familiar with Canvas are encouraged to access the [Canvas Student Guide](#) and [Canvas Student Videos](#).

Students must have the Zoom platform downloaded to their device, have access to a video camera and microphone. See Zoom guidelines posted on Canvas. The Zoom helpline can be accessed through the platform.

Instructional Methods

Practice Experience: Course content will be delivered using a variety of teaching and learning methods including practical application, preceptor discussions, assigned readings, self-study modules, and assignments. Meetings with preceptors/pharmacists and other healthcare providers will consist predominantly of informal open discussions with or without lectures. The activities outlined in the Checklist of APPE: Direct Patient Care – Patient Centered Care Activities (Appendix) are minimum standard requirements. The mechanisms to achieve these requirements may be tailored to the individual site.

Assessments

Student learning will be assessed using the following formative and summative assessment methods:

Graded Assessments:

1. Final evaluation (evaluated by preceptor and submitted into PEPRx)
2. Assignments and projects (evaluated by preceptor and incorporated into final evaluation)
3. Weekly activity summary: this form must be completed on a weekly basis in PEPRx to summarize the student's experiences in meeting the goals and objectives of the APPE course (evaluated by Course Coordinator)

Non-Graded Assessments:

1. Midpoint evaluation (evaluated by preceptor and submitted in PEPRx)
2. Self-evaluation and/or continuous professional development plan
3. Assignments and projects (evaluated by preceptor)
4. Discussion (initiated by preceptor at site or by course coordinator through Canvas)

Grading Criteria

Final Course Grade:

Course grades are determined as follows:

Assessment	% of Final Grade	Responsible Party
Final evaluation rubric	100%	Preceptor submits in PEPRx

Requirements	Final grade point deduction if submitted late/not submitted	Responsible Party
240 practice hours*	N/A	Preceptor signs certification of hours form; student submits in PEPRx
APPE: Direct Patient Care – Patient Centered Care checklist* (Appendix 1)	N/A	Preceptor initials checklist/student submits in PEPRx
Weekly activity summaries (n=6)	Maximum of four (4)	Student submits in PEPRx
Evaluation of site/preceptor	One (1)	Student submits in PEPRx

*Failure to meet these criteria will result in an incomplete or failing grade for the course

Grade Mode: Alpha/Letter grade (see student handbook for alpha/letter grading scale)

Percentage Range	Letter Grade
92.50-100%	A
89.50-92.49%	A-
86.50-89.49%	B+
82.50-86.49%	B
79.50-82.49%	B-
76.50-79.49%	C+
72.50-76.49%	C
69.50-72.49%	C-
Below 69.50%	F*

Course Requirements: Student-submitted course requirements and evaluation of site/preceptor must be completed and submitted in PEPRx by 5pm on the Monday following the last scheduled day of the APPE rotation. Students should keep copies of all APPE submitted paperwork, assignments, projects, research, and presentations in a folioRx. This portfolio must be maintained and updated for the duration of enrollment at NSU College of Pharmacy. There will be a maximum of four (4) point deduction in the final grade for late or missing weekly summary reports. There will be a one (1) point deduction in the final grade for late or missing preceptor evaluations. Paperwork points will not be awarded after the 5pm deadline.

Grading Disputes: Refer to NSU College of Pharmacy Student Handbook

Course Policies

Communication:

Course announcements will be made either in class, on Canvas or NSU email. Students are responsible for accessing and responding to all information disseminated.

Students are responsible for communicating directly with their assigned preceptor at least 4 weeks in advance of the start of their rotation to confirm availability, obtain pre-rotation instructions, and arrange the site attendance schedule. Preceptor contact information is listed in PEPRx.

Professional Behavior:

Students must conduct themselves in a professional manner. This includes maintaining the proper dress code set by the College and the site and being courteous to preceptors, interprofessional team members, site staff, other students, and patients. In courses where Zoom or a similar platform is used, students are expected to comply with the Zoom Etiquette guidelines on appropriate professional behavior. Individuals who do not conduct themselves professionally will be subject to disciplinary action.

Students must follow federal, state, local, and site-specific policies and requirements at all times while at site (e.g. HIPAA). Failure to comply with site policies or professionalism expectations may result in disciplinary action at the discretion of the preceptor; this may include temporary or permanent dismissal from the rotation site and may result in a failing course grade.

Refer to Experiential Policy and Procedure on Student Conduct on IPPE and APPE rotations regarding additional expectations.

Academic Integrity:

Academic honesty and integrity are fundamental values expected of all students. Students should avoid the appearance of impropriety in all activities. Cheating, or the appearance of cheating, will not be tolerated and is subject to disciplinary action. Cheating includes, but is not limited to:

- Failure to follow federal, state, local, and/or site-specific policies and requirements
- Sharing assignment/exam content or answers;
- Unauthorized collaboration on projects or homework;
- Plagiarism;
- Fabrication of data;
- Deceptions of any manner

Attendance:

Attendance at the practice experience is MANDATORY to meet course and licensure requirements. Students must complete a total of 240 hours over 6 consecutive weeks at the assigned practice site. Schedules will be determined by the assigned preceptor or designee. Students are responsible for knowing the scheduled dates/times to report to site, meet with preceptor, submit assignments and projects, etc. Additional time beyond allotted site attendance will be required to review information and complete assigned readings/assignments.

College holidays DO NOT apply while enrolled in experiential practice experiences. Preceptors may expect students to attend their rotation site on college holidays. Refer to the APPE Manual for additional requirements regarding attendance at experiential sites and the Experiential Policy and Procedure on Student Conduct on IPPE and APPE rotations regarding absence procedures.

Make Up:

Students must complete the required number of experiential hours at their APPE site. Any time missed due to excused or unexcused absences must be made-up on an hour-per-hour basis prior to the end of the rotation experience to fulfill course and licensure requirements. Make-up schedules will be determined by the assigned preceptor.

It is the student's responsibility to read and follow all practice and administrative requirements in the APPE Manual (posted in PEPRx) and specific to the practice site.

University Policies**Accommodation Support Services**

It is the student's responsibility to initiate the process for disability services. Students approved for accommodations under the Americans with Disability Act should have completed the required forms and received accommodation approval from the HP D student disability coordinator. Information and forms are available at <http://www.nova.edu/disabilityservices/index.html>

Course Schedule

APPE schedules will be provided by the preceptor. Students must complete a total of 240 hours over 6 consecutive weeks at the assigned practice site during the set dates for the block when the rotation is scheduled in PEPRx.

Instructional Design Map

Module # / Date	Instructional/Assessment Methods	Unit Topic	Learning Outcomes	Faculty
Weeks 1-6	Experiential learning – meeting requirements listed in the APPE: Direct Patient Care – Patient Centered Care task checklist (Appendix 1) Assessments: See Appendix 1	Direct Patient Care –Patient Centered Care pharmacy practice	EPA: 1-6 Course Objectives: 1-14	Assigned preceptor Experiential Education team

Appendix 1

Patient Care and Administrative Activities Minimum Requirements: To achieve the learning objectives of the Direct Patient Care- Patient Centered Care 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 disease states reflective of the practice environment. <i>Acute Cardiovascular Life Support (ACLS), Acute and chronic renal failure, Acute coronary syndromes, Anticoagulation – treatment & reversal, Anaphylaxis, Arrhythmias, Congestive Heart Failure (CHF), Diabetes mellitus (Diabetic Keto acidosis (DKA)/Hyperosmolar Hyperglycemic state (HHS)), Drug and alcohol withdrawal, Hyper/Hypothyroidism, Hypertension, Pneumonia, Sepsis, Status epilepticus, Skin and soft tissue infections, Stroke, and Urinary Tract Infection (UTI)</i>	
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, and dose/dose adjustments. ▪ Interact with the patient by performing medication history interview and medication or disease state counseling. ▪ Interact with providers and healthcare team by communicating medication discrepancies, therapeutic and medication selection recommendations, pharmacokinetic and nutrition assessments, adverse medication reactions, and drug information. 	
Discuss the administrative responsibilities of a pharmacist in the practice area	
Assessment of Patient Care Activities and Professional Development (Minimum Requirements): To document achievement of the learning objectives for the Direct Patient Care – Patient Centered Care APPE, students are evaluated on their ability to successfully complete the following:	Preceptor Initials to Indicate Completion
Create 6 patient-centered care plans	
Complete 2 written formal drug information responses using college or institutional documentation form, citing appropriate references	
Complete and document 5 medication reconciliations including patient medication history	
Participate in 6 or more topic discussions (preceptor or student led) <i>ACLS, Acute and chronic renal failure, Acute coronary syndromes, Anticoagulation – treatment & reversal, Anaphylaxis, Arrhythmias, CHF, Diabetes mellitus (DKA/HHS), Drug and alcohol withdrawal, Hyper/Hypothyroidism, Hypertension, Pneumonia, Sepsis, Status epilepticus, Skin and soft tissue infections, Stroke, and UTIs</i>	
Provide 4 patient counseling/education sessions (individual or group) on medications, medication delivery, medical devices, health and wellness, and/or disease states	
Prepare and present 2 formal presentations (e.g., disease state/patient case presentation, journal club, new guideline review, 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.	
Preceptor Specific Requirements	
N/A	
Optional Requirements	Preceptor Initials to Indicate Completion
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	