

RX 450 IPPE

Institutional Workbook



**Husson University School of Pharmacy
Office of Experiential Education
1 College Circle
Bangor, Maine 04401**

Contacts:

Liana Fellis, MBA, MSHR
Operations Manager, Experiential Education
School of Pharmacy
Office: 207-992-1974 Fax: 207-992-1954
Email: Fellisl@husson.edu

Peter McLean, PharmD.
Director of Experiential Education
School of Pharmacy
Office: 207-941-7089
Email: Mcleanp@husson.edu

Table of Contents

Table of Contents	1
Course Syllabus.....	2
Policies and Procedures.....	3
Pre-Institutional IPPE Reflection.....	6
Medications Order Processing	7
Medication Safety	8
Compounding Sterile Preparations	9
Intravenous Medications	16
Management.....	19
Calculations.....	20
Therapeutics Review and Resource Utilization.....	23
Drug Review Challenge	23
Medication Reconciliation	24
Post-IPPE Assignments.....	25
Important Reminders.....	26
Appendices	27

Course Number:	RX 450	
Course Title:	Introductory Pharmacy Practice Experience - Institutional	
Credits:	3	
Course Coordinator:	Peter McLean, PharmD Director of Experiential Education Office: 333D Peabody Hall Email: mcleanp@husson.edu Tel: 207-941-7089	
Teaching Faculty:	Assigned institutional preceptor	
Required Foundation	P2 standing and in good academic standing at 2.0 or better	
Course Description:	<p>The IPPE institutional course is to expose P2 pharmacy students to the everyday practice of pharmacy in the institutional setting. The student should be introduced to all aspects of professional interactions with patients and coworkers, medication distribution and/or dispensing, and pharmacy management.</p> <p>It is to be understood that students have achieved and can demonstrate competency in the categories mentioned in IPPE-Community course and that this institutional rotation is to build on these competencies and advance student's learning to the next level.</p> <p>The course will be completed at an assigned institutional site over a three-week period of time (120 hours total). The students will be assigned by OEE to one of the blocks available. There will be blocks offered during the J-Term (December to January) and during the Summer Term (May to August).</p>	
IPPE Competency Statements	ACPE Code	Competency Statement
	ACPE2016GAPXA0 2.i	I can perform a basic review of a patient's medication profile to identify medication allergies, correct doses, duplicate medications, and important drug interactions.
	ACPE2016GAPXA0 9.f	I can collect accurate and comprehensive drug information from appropriate sources to make informed, evidence-based, patient-specific, or population-based decisions.
	ACPE2016GAPXA0 6.e	I can comply with federal, state, and local laws and regulations related to pharmacy practice.
	ACPE2016GAPXA0 8.a	I can use effective written, visual, verbal, and nonverbal communication skills to provide patient/caregiver self-management education.
	ACPE2016GAPXA0 7.a	Communicate effectively (using verbal, non-verbal, and written communication as appropriate) with patients, caregivers, and other healthcare providers, at a suitable level for the partner in the interaction, to engender a team approach to patient care.
	ACPE2016GAPXA0 4.c	I can evaluate patient information and medication information that places a patient at risk for developing drug-related problems.
	ACPE2016GAPXA0 6.g	I can demonstrate professional and ethical behavior in all practice environments.
	ACPE2016GAPXA0 6.g	I can demonstrate ethical practice, including maintaining patient confidentiality, responding to errors in care, and professional misconduct (including plagiarism).
		I can describe the workload and financial performance indicators of the site and the purchasing/inventory process.
	ACPE2016GAPXA0 1.a	I can observe the accurate preparation and dispensing of medications.

	ACPE2016GAPXA0 1.b ACPE2016GAPXA0 1.c	I can utilize medication use systems, formulary development, medication error and adverse drug reaction prevention.
	ACPE2016GAPXA0 6.g	I can demonstrate self-awareness by evaluating Self-assess assessments of the attainment of course outcomes and content / topics / disease states / drugs in conjunction with the PPCP model (preceptor will evaluate student's mid-rotation self- evaluation). Demonstrate empathy, assertiveness, effective listening skills, and self-awareness.

**Please note that the material in this syllabus is subject to change at the discretion of the preceptor and coordinator. However, the minimum requirements set forth by the syllabus must always be completed. The student will be informed of any changes by the course coordinator.

Policies and Procedures

Please refer to the HUSOP student handbook (RxPreceptor) for a complete discussion of policies and procedures.

Course Grade Determination:

Outcome:	Pre-IPE Assignments	Weekly Reflections (#2)	Medication Orders Processing	Compounding Sterile Preparations	Intravenous Medications Safety	Therapeutics Preparation and Resource Utilization	Crash Cart's	Management	Calculations	Drug Review Challenges	Medication History/Patient Interview	Post-IPE Reflection (Weekly Reflection #3)	Preceptor Evaluation of Student	Post-IPE Assignment	Points per outcome	% per outcome	
	45	125	30	30	20	20	90	40	20	90	60	100	65	15	250	1000	
I can perform a basic review of a patient's medication profile to identify medication allergies, correct doses, duplicate medications, and important drug interactions.									10			20		21		50.8	5%
I can collect accurate and comprehensive drug information from appropriate sources to make informed, evidence-based, patient-specific, or population-based decisions.				10		20	90			90	60			21		291	29%
I can comply with federal, state, and local laws and regulations related to pharmacy practice.				10	10									21		40.8	4%
I can use effective written, visual, verbal, and nonverbal communication skills to provide patient/caregiver self-management education.		63										15		21		98.3	10%
Communicate effectively (using verbal, non-verbal, and written communication as appropriate) with patients, caregivers, and other healthcare providers, at a suitable level for the partner in the interaction, to engender a team approach to patient care.		63										15		21		98.3	10%
I can evaluate patient information and medication information that places a patient at risk for developing drug-related problems.									10			15		21		45.8	5%
I can demonstrate professional and ethical behavior in all practice environments.		23										10		7.5	21	60.8	6%
responding to errors in care, and professional misconduct (including plagiarism).		23		5								10		7.5	21	65.8	7%
I can describe the workload and financial performance indicators of the site and the purchasing/inventory process.			30					20						21		70.8	7%
I can observe the accurate preparation and dispensing of medications.				5	10									21		35.8	4%
I can utilize medication use systems, formulary development, medication error and adverse drug reaction prevention.								10				15		21		45.8	5%
I can demonstrate self-awareness by evaluating Self-assess assessments of the attainment of course outcomes and content / topics / disease states / drugs in conjunction with the PPCP model (preceptor will evaluate student's mid-rotation self- evaluation).								10					65	21		95.8	10%
																1000	100%
	45	125	30	30	20	20	90	40	20	90	60	100	65	15	250	1000	
	5%	13%	3%	3%	2%	2%	9%	4%	2%	9%	6%	10%	7%	2%	25%		

- Assignments that are completed from the workbook must be submitted to the course coordinator via ExamSoft

*Please note that your preceptor reserves the right to give you additional projects to work on during your rotation. Those will also be included and considered as part of your final grade and must be uploaded to ExamSoft.

***All work must be submitted through ExamSoft**

- Weekly reflections completed and uploaded
- Preceptor grading and evaluation submitted to RxPreceptor

*In order to receive your grade, you must also complete:

- Preceptor Approved Time Tracking
- Preceptor/Site/Self Evaluations

1. **Grading Scale:** Grades for each rotation are determined by the preceptor according to the criteria outlined in the rotation syllabus. Grades are determined on the following percentage basis:

94-100%	A
90-93%	A-
87-89%	B+
83-86%	B
80-82%	B-
77-79%	C+
73-76%	C
70-72%	C-
≤70%**	F

**It should be noted that any grade lower than a 70% will not count towards graduation

Please note that any student who is dismissed from his/her IPPE for unprofessional conduct will automatically receive a failing grade for the IPPE in question.

Student Evaluation: Based on the policies, goals and activities outlined in the syllabus.

1. Students may solicit verbal evaluations of performance at any time throughout the course.
2. Formal final evaluations will be conducted by the preceptor via the RxPreceptor.

Preceptor and Site Evaluation: The students will have the opportunity to **confidentially** evaluate the preceptor, site and IPPE, on Rx Preceptor. Constructive feedback on the quality of the experience, site and preceptor allows for program improvement. Grades will not be submitted to the Registrar's Office until IPPE evaluations are submitted and other course work is completed and uploaded.

Assignments: Each student is expected to complete the IPPE institutional workbook and the assigned reflections. The student will also complete a ‘checklist’ of items to be completed at the site. Failure to complete the workbook and the reflections will result in a grade of “incomplete” for the course and may result in failure. Completed assignments will be uploaded into ExamSoft. Additionally, special projects may be assigned by the preceptor on an “as needed” basis and must be completed and uploaded into ExamSoft by the end of the rotation.

Weekly Reflections

At the end of each week write a reflection/summary essay that addresses the activities you have participated in and how they aligned with your goals and objectives. Also include any newly identified objectives and your course of action for the upcoming week which will maximize your learning opportunities while attaining your goals. **(Total of three reflections)** The final reflection must discuss interprofessional collaboration and its impact on patient care in the hospital setting.

Interprofessional Collaboration Reflection Prompts

Prompt for 11.1

What distinct values and ethics of the professions represented on the healthcare team did expect, and what did you observe? How did these different ethics or values impact the team’s collaboration?

Prompt for 11.2

You had an opportunity to engage with a physician’s student as part of the IP team to both learn from and with them during this experience. Please describe what you learned about the abilities, competencies, and scope of practice of various healthcare professionals. Which additional interprofessional might have contributed to this case study – please explain your reasoning?

Prompt for 11.3

What are the pharmacist’s responsibilities as a participant of an interprofessional healthcare team? What processes did the team use to make decisions? What skills or knowledge did you observe that you may use to inform your future therapeutic decision-making?

*****To maximize exposure, the IPPE is designed for three weeks, five days a week, at eight hours per day for 120 hours total. The schedule may be altered by the preceptor (not the student) and the student will accommodate the preceptor’s schedule. If your preceptor identifies other opportunities/experiences, i.e., weekend or night shift, that fall outside M-F, those hours may be substituted for a day shift.***

Rotation Assignments

The following assignments will require you to gather specific information at your site. *However*, the work/responses are to be completed as homework **off-site**.

1. Pre-Institutional IPPE Reflection

Answer the following questions prior to your first day of the IPPE.

**Discuss your reflection with your preceptor on the first day or prior to that time.*

What is your goal for this IPPE? (A goal is overarching)

What are your objectives for this IPPE? (Objectives are ways to get closer to your goal)

What role do you think a pharmacist plays in an institutional setting?

Medication errors are a major concern in pharmacy practice. What do you think is the biggest contributor to errors? Please elaborate.

What would you do if you have a physician that insists on a dose that is above the manufacturer's recommended maximum?

2. Medication Orders Processing

Think about these questions and try to answer them on your own. If you cannot find the answer, *then* ask your preceptor for direction on where to find the answer. If time permits, discuss your answer with your preceptor.

Describe the way(s) in which a medication is both ordered and received at the pharmacy from the wholesaler (medication procurement).

How is a medication ordered by the provider? What is pharmacy's role? (Describe the medication order system.)

How does the medication get to the patient? What are protocol orders and who initiate's them? Describe pharmacy's role. (Describe the distribution system.)

Describe the various roles a technician plays at the pharmacy (central, decentralized, IV room, etc.).

What is "unit dosing"? How are expiration dates determined on a unit dose?

3. Medication Safety

[The Institute for Safe Medication Practices' \(ISMP\)](#) vision statement is to be the premier, independent, patient safety organization leading the effort to prevent medication errors and adverse drug events. They are a nonprofit organization devoted entirely to medication error prevention and safe medication use. ISMP represents over 30 years of experience in helping healthcare practitioners keep patients safe and continues to lead efforts to improve the medication use process. The organization is known and respected worldwide as the premier resource for impartial, timely, and accurate medication safety information.

According to the National Coordinating Council for Medication Error and Prevention, What is the definition of a “medication error”?

Medication use is a complex process that comprises the sub-processes of medication prescribing, order processing, dispensing, administration, and effects monitoring. The interrelationships among key elements form the structure within which medications are used.

What are the “ten key elements” of the medication-use system?

What are high alert medications?

List the categories/classes of high alert medication and provide an example of each.

Look-A-Like Sound-A-Like

Please list five examples of confused drug names.

Discuss the measures that are in place **at your site** to prevent such mistakes?

DO NOT CRUSH List:

Where are you able to find this information?

Can you crush the following medication? Why or why not?

Lisinopril

Metoprolol Succinate

Amlodipine

Isosorbide Mononitrate

Protonix

Can you crush it?	Reason

4. Compounding Sterile Preparations

Refer to the following references for answers:

- The Joint Commission (formerly known as JCAHO). <http://www.jointcommission.org>
- ASHP Guidelines on Compounding Sterile Preparations (USP Chapter <797>)
<https://www.ashp.org/-/media/assets/policy-guidelines/docs/guidelines/compounding-sterile-preparations.ashx>

- Judith E. Thompson. A Practical Guide to Contemporary Pharmacy Practice/Judith E. Thompson, with CD/audiovisuals by Lawrence W. Davidow.-3rd ed. (Husson Library)

A. The Joint Commission

An independent, not-for-profit organization, The Joint Commission accredits and certifies more than 17,000 health care organizations and programs in the United States. The Joint Commission accreditation and certification is recognized nationwide as a symbol of quality that reflects an organization's commitment to meeting certain performance standards.

The National Patient Safety Goals program provides a significant focus on patient safety within health care and is designed to stimulate organizational improvement activities for several of the most pressing patient safety issues that all organizations are struggling to manage effectively.

List the broad areas of the 2020 Hospital National Patient Safety Goals and identify one specific goal within that area?

Identify two Goals and explain how **your site** is meeting them.

-
-

B. USP <797>

The 2004 issue of the United States Pharmacopeia-National Formulary (USP-NF) contained the first enforceable USP chapter on the topic of compounded sterile preparations (CSPs) entitled "USP Tests and Assays Chapter <797>, Pharmaceutical Compounding, Sterile Preparations"

USP Chapter <797> is considered to be an official minimum standard for pharmacy sterile compounding, and it is therefore enforceable by the Food and Drug Administration (FDA), state boards of pharmacy, boards of health, and other regulatory agencies.

The objective of USP Chapter <797> is to prevent harm to patients, including death, which could result from the following with respect to CSPs:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____

To whom does this chapter apply?

What are compounded sterile products (CSPs)? Give an example of each category.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

What are the responsibilities of compounding personnel according to USP <797>?

Persons who supervise the compounding and dispensing of CSPs should be a “qualified licensed healthcare professional” and are responsible for ensuring that the following 14 objectives are achieved:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____

- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____
- 13) _____
- 14) _____

What is “Beyond Use Date (BUD)”?

What is the difference between a Beyond Use Date and an expiration date?

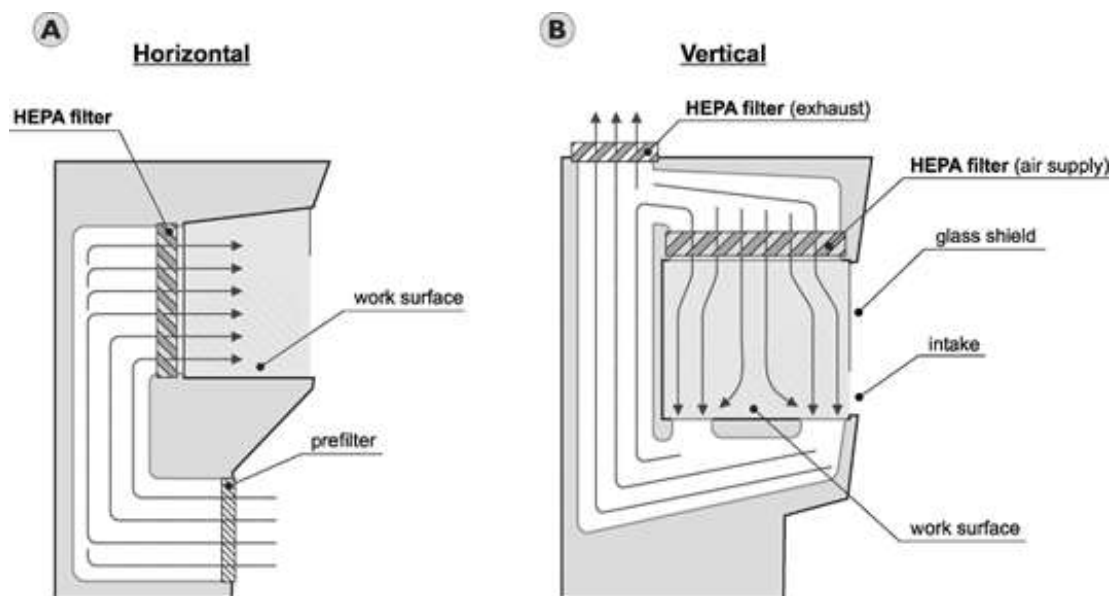
How does your site determine BUDs? Where is this information available?

*USP Chapter <797> defines five levels of risk related to sterile preparations and includes quality assurance requirements for each risk level: Immediate-Use Category, Low-Risk Level, Low-Risk Level with less than 12 hr. beyond use date, Medium-Risk Level, High-Risk Level. For each risk level classification discuss: requirement; Beyond Use Date at Room Temperature and Beyond Use Date with Refrigeration.

Define the following with ISO Class:

- Ante-area
- Buffer area
- Clean rom
- Critical area
- Multiple-dose container (ISO Class N/A)
- Single-dose container (ISO Class N/A)

What is the process at your site for training and certification of a technician to make IV products?



<http://media.wiley.com/CurrentProtocols/ET/et0401/et0401-fig-0003-1-full.gif>

What is the difference between a horizontal, a vertical flow hood and a barrier isolator (glove box)? Please describe a situation in which you would use each of these hoods.

C. USP <800>

USP <800>, published on February 1st, 2016, describes requirements including responsibilities of personnel handling hazardous drugs; facility and engineering controls; procedures for deactivating, decontaminating, and cleaning; spill control; and documentation. The standards set forth by USP <800> apply to all healthcare personnel that come in contact with hazardous drugs and the environments in which they are handled.

1. List five (5) hazardous drugs that fall under the jurisdiction of USP <800>

- _____
- _____
- _____
- _____
- _____

2. Hazardous drugs can unintentionally enter the body via inhalation, ingestion, dermal and mucosal absorption, and injection. During the course of normal operations for both clinical and

non-clinical personnel, what eight (8) activity categories (as identified by USP General Chapter <800>) are significant opportunities for potential exposure?

- _____
- _____
- _____
- _____
- _____
- _____

3. Which two forms of primary engineering control (PEC) are used for hazardous drugs? Describe how their operation protects personnel and how they differ from the laminar airflow workbench (LAFW).

D. Total Parenteral Nutrition (TPN):

What is a TPN?

Please describe a situation in which a TPN is warranted

What are the basic components of most TPNs?

- | | |
|----------|----------|
| 1. _____ | 4. _____ |
| 2. _____ | 5. _____ |
| 3. _____ | 6. _____ |

E. Crash Carts:

A “crash cart” or “code cart” is an essential piece of equipment that is located throughout a hospital campus. It typically contains all the essential equipment and medications to follow ACLS protocol. Please complete the following questions and activities related to crash carts.

What does the term “ACLS” stand for?

List the locations of ALL the crash carts located in the hospital:

What drugs does the crash cart contain? What is each drug used for?
(List all and indication for each medication)

5. Intravenous Medications

Each week while you are on your IPPE, ask your preceptor to identify one IV medication and complete the following tables.

	Week 1
<i>Drug</i>	
Mechanism of action	
Dose (adult and Pediatric)	
Diluent Solution	
Indication	
Minimum and Maximum Concentration	
Rate of administration	
Storage and stability	
Pregnancy/lactation	
Renal Dose Adjustments	
Hepatic Dose Adjustments	
References(s)	

	Week 2
<i>Drug</i>	
Mechanism of action	
Dose (adult and Pediatric)	
Diluent Solution	
Indication	
Minimum and Maximum Concentration	
Rate of administration	
Storage and stability	
Pregnancy/lactation	
Renal Dose Adjustments	
Hepatic Dose Adjustments	
References(s)	

	Week 3
<i>Drug</i>	
Mechanism of action	
Dose (adult and Pediatric)	
Diluent Solution	
Indication	
Minimum and Maximum Concentration	
Rate of administration	
Storage and stability	
Pregnancy/lactation	
Renal Dose Adjustments	
Hepatic Dose Adjustments	
References(s)	

6. Management

Observe the following people and fill out these tables. If one person performs more than one function, then describe how each job responsibility is accomplished. What are the benefits and challenges of each position?

	Director of Pharmacy
Responsibilities	<div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px;"></div>
	Staff Pharmacist
Responsibilities	<div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px;"></div>
	Clinical Pharmacy Specialist
Responsibilities	<div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px;"></div>
	Central Pharmacy Technician
Responsibilities	<div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px; margin-bottom: 5px;"></div> <div style="border-bottom: 1px solid black; height: 15px;"></div>
	IV Room Technician

Responsibilities	<hr/> <hr/> <hr/>
------------------	-------------------

7. Calculations

1. A patient weighs 218 pounds. What is the patient's weight in kilograms?
 - a. If a patient weighs 56 kilograms, what is their weight in pounds?
 - b. The patient's height is 163cm. What is their height in inches?

2. **Dose Conversions**
 - a) If furosemide is dosed 40mg PO, what is the equivalent IV dose?
 - b) 2mg of bumetanide administered intravenously is equivalent to how many mg orally?
 - c) If 100mg of metoprolol tartrate is given PO, what is the equivalent IV dose?

3. If 1,750 grams of a mixture contains 25 grams of drug, what is the percentage strength (w/w) of the mixture? Round to the nearest tenth.

4. Express 1:1,250 as a percentage strength.

5. A pharmacist is asked to prepare 1 gallon of tincture containing 5.5% iodine. The pharmacy has 3% iodine tincture and 8.5% iodine tincture in stock. How many mL of the 3% and 8.5% iodine tincture should be used? (Use 1 gallon = 3,785 mL)

6. Determine the ideal body weight (IBW) of an 87 year old female patient with an actual body weight of 74kg and a height of 193cm.

- a) The recommended dosing scheme of drug A is 7.5mg/kg q12h for patients with normal renal function. In patients with renal impairment, the following dosage schedule is used:

CrCl (mL/min)	Dose	Interval
≥ 80	7.5mg/kg	q 12h
50 – 79	5mg/kg	q 12h
25 – 49	5mg/kg	q 24h
< 25	2.5mg/kg	q 24h

Determine this patient's creatinine clearance rate given a serum creatinine of 1.7 mg/dL using the ideal body weight (IBW). What is the appropriate dose and interval for this drug in this patient?

7. Heparin Dosing

Initial Dose	70 units/kg bolus, then 15 units/kg per hour	
aPTT result	Action	Next aPTT
aPTT <35 seconds (<1.2x control)	80 units/kg bolus, then increase infusion rate by 4 units/kg per hour	6 hours
aPTT 35 to 45 seconds (1.2 to 1.5x control)	40 units/kg bolus, then increase infusion rate by 2 units/kg per hour	6 hours
aPTT 46 to 70 seconds (1.5 to 2.3x control)	No change (therapeutic range)	6 hours (when two consecutive values are within therapeutic range, then next aPTT in morning)
aPTT 71 to 90 seconds (2.3 to 3.0x control)	Decrease infusion rate by 2 units/kg per hour	6 hours
aPTT >90 seconds (>3.0x control)	Hold infusion 1 hour, then decrease infusion rate by 3 units/kg per hour	6 hours

- a) Given the following patient parameters, calculate BMI, IBW, Adj.BW, and CrCl:
- 66 year old female
 - Atrial fibrillation (heparin for prevention of stroke and systemic embolism)
 - weight: 208 lbs
 - height: 167cm
 - SCr: 1.3 mg/dL
- b) Calculate the appropriate initial heparin bolus dose using actual body weight:
- c) The next aPTT level drawn returns at 92 seconds. What is the new heparin infusion rate (units/kg/hr)? When would we schedule the next aPTT draw for?

Vancomycin dosing:

Identify a patient that is going to be started on (or already is on) vancomycin and discuss the following with your preceptor:

- 1- Reason for starting the patient on vancomycin?
Is a bolus dose appropriate?
Please calculate the dose and show your work.
Does this agree with your patient's dosage? _____

- 2- How is therapeutic efficacy determined? What is considered a therapeutic level of vancomycin?

When is a trough drawn? _____

What do we monitor in a patient that has been administered vancomycin?

8. Therapeutics Review and Resource Utilization:

Four (4) modules are assigned in this workbook to give each student additional practice in areas of pharmacy. These modules that are assigned will have the RXPrep NAPLEX® resources defined and the evaluations to be utilized. When the quiz or evaluation is complete, please capture a screenshot of the results and upload the file to ExamSoft. This assignment may need to be completed at home.

Four (4) modules:

A. Depression	Chapter 63
B. Diabetes	Chapter 44
C. Dyslipidemia	Chapter 27
D. Renal Disease	Chapter 18

9. Drug Review Challenges

McGraw-Hill's NAPLEX® Review Guide, 2e has a '*Top 300 Drug Challenge*' resource as well. This can be structured for any level desired and by types of agents. This is a helpful resource for reviewing and assessing drug knowledge.

A. <http://accesspharmacy.mhmedical.com/qa.aspx#tab3>

1. Study Tools section
2. Go to: Top 300 Drugs Challenge
3. Choose "Tier 2" for the following agents:
 - Analgesics
 - Gastrointestinal
 - Neurologic
4. Start Test
5. Upload the results to ExamSoft

10. Medication Reconciliation

One of the most important steps of delivering optimal health care is obtaining an accurate medication list from the patient. While at your practice site discuss **medication reconciliation** procedures with your preceptor. As you complete the following assignments, **ensure HIPAA compliance** through deidentification of protected health information (PHI).

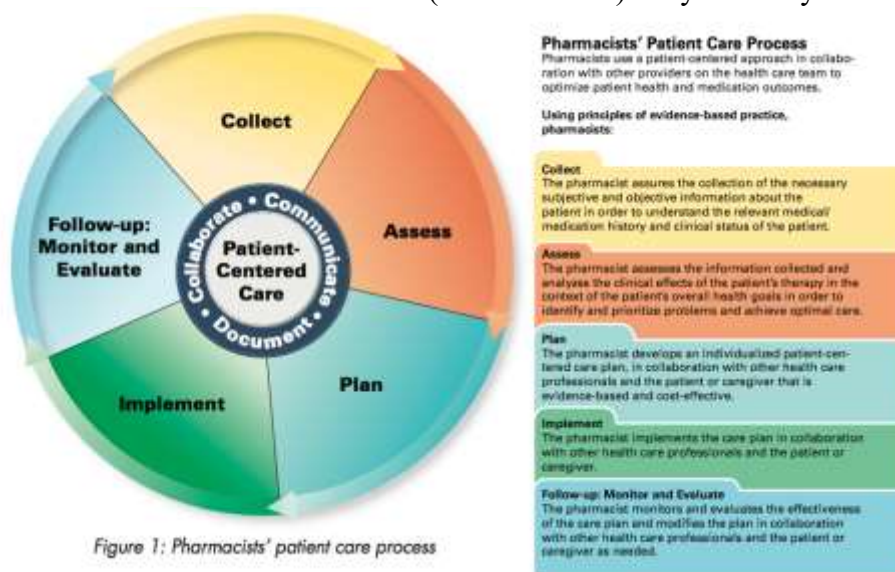
1. Arrange with your preceptor an opportunity to utilize patient electronic medical records (EMRs) and conduct **two medication reconciliations** following your sites medication reconciliation protocols. Observe your preceptor or another pharmacist conducting at least

two patient interviews or counseling sessions. A template medication reconciliation form is provided in the appendix.

2. After conducting both medication reconciliations, choose (1) patient to complete a **full chart review**. Please review the patient's medication profile to identify medication allergies, correct doses, duplicate medications, and important drug interactions. Please put the information you found in a SOAP Note. A template SOAP note form is provided in the appendix.

11. Post IPPE Assignments

Write a reflective essay detailing what you have taken away from this rotation. Include how you have met your personal goal(s). This is not a one paragraph assignment, but rather an opportunity for you to seriously reflect upon what you were exposed to and accomplished toward your professional goals during the previous three weeks. Utilize your one-week reflection/summary reports as a guide. Incorporate the Pharmacists' Patient Care Process (as seen below) for your essay.



The Pharmacists' Patient Care Process uses a patient-centered care approach, in collaboration with other providers, in order to optimize patient health outcomes. How did your IPPE site utilize this process for the well-being of their patients? Could they improve on this? If so, how? Please go through each step and explain your thoughts.

Has your perspective changed?

- Medication errors are a major concern in pharmacy practice. What do you think is the biggest contributor to errors? Please elaborate.
- What would you do if you have a physician that insists on a dose that is above the manufacturer's recommended maximum?
- What role do you think a pharmacist plays in an institutional setting?

Important Reminders!!!

- You must record your hours in RxPreceptor. Your preceptor will confirm the hours recorded. Refer to the IPPE Handbook for instructions on how to do so.
- At the end of your rotation, you are required to complete two evaluations:
 - i) Evaluation of Preceptor
 - ii) Site Evaluation.

****One hallmark of a professional is giving back to their profession. Husson School of Pharmacy and you, the student, are fortunate that so many practicing pharmacists have stepped forward to contribute their time and talents to the experiential component of your education. In a few years you will have the opportunity to meet this expectation and give back to HUSOP and/or the profession of pharmacy. **The preceptor's contribution to your education is a gift and good etiquette recommends it should be recognized.** *A written thank you note is always in style.***

APPENDICES

Medication Reconciliation Form

[illegible]

SOAP Note

Name:		Date:	
Time:		Credentials:	
Subjective	<u>Chief Complaint</u>		
	<u>Past Medical History</u>		
	<u>Allergies / Adverse Reactions</u>		
	<u>Social History</u>		
	<u>Current Medications</u>		
Objective	<u>Vitals</u>		
	<u>Labs</u>		
	<u>Diagnostic Tests / Procedures</u>		
	<u>Physical Assessment</u>		
Assessment	<u>Prioritized Medical Problem List</u>		
	<u>Monitoring Parameters</u>		
	<u>Renal / Hepatic Dose Adjustments</u>		
Plan	<u>Final Recommendations</u>		
	<u>Planned Monitoring</u>		
	<u>Monitoring and Follow-up Recommendations</u>		
Signature: X _____			
Name:		Contact Number:	
Credentials:			