Introductory to Pharmacy Practice Experience
Summer Experience
Florida A&M University
College of Pharmacy and Pharmaceutical Sciences

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Introduction to the Introductory Pharmacy Practice Experience (IPPE)

During your coursework you will learn how to treat an ear infection. From your service experience you will learn that it is impossible to treat an ear infection if the family doesn’t understand your language, if they can’t afford the medication, if they don’t have transportation, if they don’t understand the importance of the medication, or they don’t trust their doctor. As pharmacists we must call upon multifaceted experiences to find solutions to basic problems.

Paraphrased from the College of Pharmacy, University of Texas at Austin, Purdue University

The Introductory Pharmacy Practice Experience program at Florida A&M University was developed in response to the Accreditation Standards set forth by the Accreditation Council for Pharmacy Education to provide early experiential learning opportunities for pharmacy students throughout the curriculum. Students explore the concept of professionalism, develop practice skills, explore a variety of career opportunities, and gain hands-on experience with patients in the delivery of holistic pharmaceutical care. Multiple opportunities for reflection and group discussion are provided throughout the Introductory Pharmacy Practice Experience program.

The Florida A&M University Introductory Pharmacy Practice Experience course series includes:

IPPE 3000C  IPPE I  Professional Service Experience/Shadowing for first professional year students (Fall)
IPPE 3002C  IPPE II  Professional Service Experience/Shadowing for first professional year students (Spring)
IPPE Summer Experience  Professional Service Experience for second professional year students
PHA 5005C  IPPE III  Professional/Patient Services Experience for third professional year students
PHA 5006C  IPPE IV  Professional/Patient Services Experience for third professional year students

Goals of the Professional Service Experience
The primary goal of the Professional Service Experience is for students to develop professional attitudes and behaviors through interaction with diverse populations and healthcare service providers, while impacting a community healthcare need. The students’ individual experiences, when shared among peers, will increase awareness of available community services. The students’ service experiences are correlated to PHA 5XXX curricular coursework through written assignments, group discussion and reflection. The Professional Service Experience will provide opportunity to improve both oral and written communications skills.

IPPE Summer Experience: (Occurs in the May/June of every year at the end of the student’s second professional year):
The objectives for P2 involve health-systems management and participation in day-to-day pharmacy activities including dispensing, compounding, patient counseling, prescription input, and profile reviews. The majority of students’ time (minimum of 160 hours) must be balanced between community and institutional health system settings.
ACADEMIC LEARNING COMPACT

1. **Critical Thinking:** Graduating seniors will demonstrate the ability to critically think, analyze, and solve problems to make judgment and pharmacy decisions.

2. **Communication and Interpersonal Skills:** Graduates will demonstrate the ability to communicate verbally and in writing with patients, caregivers, and other healthcare practitioners.

3. **Content Knowledge:** Graduates will demonstrate an understanding of knowledge, concepts and skills necessary to become a pharmacist.

4. **Ethics:** The graduate shall provide high quality pharmaceutical care utilizing ethical and moral standards.

5. **NAPLEX Pass Rates:** Graduates will pass the NAPLEX on the first attempt.

GOALS OF THE CURRICULUM

It is the Goal of the curriculum to prepare the graduate with the following professional and general abilities¹:

1. Provide patient-centered and population-based pharmaceutical care in a professional and competent manner;
2. Manage and use resources in a health care system in accordance with legal, social, economic, and professional guidelines;
3. Promote health improvement within the community and in various health venues;
4. Communicate with patients, caregivers, other health care professionals, and the community at-large;
5. Employ life-long learning techniques to maintain competence in a dynamic profession.

Ability-Based educational outcomes for students

**Pharmaceutical Care Ability**

1. **Pharmaceutical Care Plan Development** – The student shall develop pharmaceutical care plans that maximize the patient’s response to drug therapy and prevent or resolve drug-related problems in order to ensure positive outcomes. The student shall appropriately document the implementation of and assess the outcomes related to the care plan. The care plan should identify and prioritize patient’s problems, delineate monitoring parameters, and include educational information (e.g. nutrition, lifestyle) intended to promote general health and prevent or minimize disease progression.
   a. Develop a traditional pharmacist-patient relationship
   b. Determine the pharmacist’s role in the patient’s care
c. Identify and prioritize patient problems

d. Collect and interpret relevant data (drug information/literature)
   i. Interpret drug, disease, and patient information to determine if and how a patient’s undesirable signs and symptoms are caused directly by a drug which the patient is taking or has recently taken
   ii. Interpret drug, disease, and patient information to determine if and how a patient’s undesirable signs and symptoms could be more appropriately treated with drug therapy or by halting drug therapy
      1. Determine if the patient has an unrecognized disease which requires treatment
      2. Determine if the patient is experiencing side effects which require additional drug therapy
      3. Determine whether patient requires preventive drug therapy
e. Determine whether the patient requires additional drug therapy to augment or potentiate primary drug therapy.
f. Identify pharmacotherapeutic outcomes and endpoints
g. Develop and execute a monitoring plan

h. Correctly identify, satisfactorily solve, and effectively prevent the drug-related problems from the eight categories which most commonly occur and are most likely to cause the greatest harm
   i. Take or receive agent for no medically valid indication
   ii. Need pharmacotherapy but is not receiving it
   iii. Take or receive incorrect medication
   iv. Take or receive inappropriate therapeutic dose drug
   v. Recommend appropriate dose
   vi. Take or receive a drug inappropriately
   vii. Experience an adverse reaction
   viii. Experience a drug interaction
   i. Demonstrate provision of culturally and linguistically appropriate pharmaceutical care services to diverse patient populations.

2. **Patient Evaluation** – The student shall conduct patient assessments and contribute to the database of information about a patient by: (1) performing a medication history and reviewing patient systems and charts; (2) recommending and interpreting laboratory tests; (3) assessing medical, physical, psychosocial, behavioral, and economic status; and (4) identifying drug-related dilemmas.
   a. Evaluate the basic components of a patient’s chart
   b. Evaluate and document patient vital signs or laboratory values
   c. Evaluate patient information to determine the safety and effectiveness of pharmacotherapy
   d. Identify and/or use instruments and techniques related to patient assessment and diagnosis
   e. Identify and define the terminology, signs, and symptoms associated with disease and medical conditions
   f. Identify drug and non-drug methods of preventing and treating diseases and medical conditions
g. Identify patient factors, biosocial factors, and concurrent therapy that are relevant to the maintenance of wellness and the prevention or treatment of a disease or medical condition

3. **Pharmacotherapy Evaluation and Decisions** – The student shall assess and monitor the patients’ drug therapy, including consideration of economic status, pathophysiology and the chemical, pharmaceutical, pharmacokinetic, pharmacological and pharmacogenomic characteristics of the administered therapy. The student shall make pharmacotherapy decisions and support those decisions based upon evidence in primary, secondary or tertiary literature and knowledge of biomedical, pharmaceutical, administrative and clinical sciences. The student shall recommend patient use of prescription and non-prescription medications, as well as non-drug therapy, when appropriate.
   a. Identify drug products by their generic, trade, and/or common name
   b. Identify the postulated sites and mechanisms of action of pharmacotherapeutic agents.
   c. Evaluate drug therapy for the presence of pharmacotherapeutic duplications and interactions
   d. Identify, describe the mechanism of, and remedy adverse reactions and iatrogenic or drug-induced illness
   e. Identify indications, contraindications, warnings, and precautions associated with a drug product’s active and inactive ingredients
   f. Identify physiochemical properties of drug substances that affect their solubility, pharmacokinetics, pharmacologic actions, and stability
   g. Interpret and apply pharmacokinetic principles to calculate and determine appropriate drug dosage regimens
   h. Interpret and apply biopharmaceutic principles and the pharmaceutical characteristics of drug dosage forms and delivery systems, to assure bioavailability and enhance patient compliance
   i. Prevent, recognize, and remedy noncompliance and drug misuse or abuse
   j. Perform a pharmacoeconomic analysis through employing the resources of health care, relevant primary literature, and economic models

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4. **Public Health** - The student shall actively participate in national, state, and/or local organizations, initiating and implementing change in pharmacy practice and health care delivery. The student shall participate in activities that emphasize disease prevention, health promotion, patient safety, and health literacy, with special effort directed toward indigent areas and in communities commonly affected by health disparities. The student shall understand the process involved in implementing public health policy.

a. **Assure the availability of effective, quality health and disease prevention services.**
   
i. **Assure access to rational, safe, and cost-effective drug therapy and pharmaceutical care.**
      
1. Provide clinical preventive services to improve outcomes and quality of life
2. Educate patients about behaviors that promote health, maintain wellness, prevent and control disease, and reduce health disparities
3. Evaluate the quality and effectiveness of clinical and community-based interventions designed to improve health
4. Use communication strategies strategically to improve health.

ii. Define and assess the health status of individuals and populations, including determinants of health and illness, factors contributing to health promotion and disease prevention, factors influencing the use of health services, and epidemiology (e.g., incidence, prevalence) of diseases.

iii. Assess and monitor at-risk populations to identify and report health problems, and to prioritize interventions in collaboration with patients, other health professionals, members of the community, and policy makers.

iv. **Select and implement strategies to prevent or detect disease in the target population.**

1. Determine the pharmacist practice activity domains in public health initiatives and responses and promoting safe medication use in society.
2. Formulate strategies to offer disease detection and prevention programs to the public.
3. Implement disease detection and prevention health care services (e.g., smoking cessation, weight reduction, diabetes screening, blood pressure screening, immunization services) to prevent health problems and maintain health.
4. Provide public health related educational material or services tailored to the needs and background of a given audience.
5. Identify the roles pharmacists play in emergency preparedness (e.g., bioterrorism and chemical terrorism, natural disasters) and response (e.g., medication dispensing, information provision, vaccination response teams, and medical reserve corps) on the local community and national levels. Provide care and evaluate outcomes.
General Ability

1. **Critical Thinking Skills**: The student shall acquire, comprehend, apply, analyze, synthesize, and evaluate information. The student shall employ and integrate these skills to identify, resolve and prevent problems and make appropriate decisions and recommendations.
   a. Acquire, evaluate, and make inferences from oral, written and visual aids
   b. Acquire and evaluate relevant information, analyze arguments, synthesize facts, and information, and offer logical approaches, leading to an informed decision
   c. Identify and solve problems reflectively by conceiving alternatives and evaluating competing views or courses of action

2. **Communication** – The student shall read, write, speak, listen, and use multimedia technology to communicate effectively. The student shall counsel and educate patients, care givers, and other health care practitioners. The student shall also collaborate with other health care practitioners, community service or health care agencies, policy makers, patients, and family members to effectively develop interpersonal and interprofessional relationships.
   a. Develop nonverbal, verbal, written and graphic communication skills to communicate effectively with patients, care-givers, or family
   b. Develop nonverbal, verbal, written and graphic communication skills to communicate effectively with health-care providers
   c. Apply communication skills in interpersonal relationships to improve the clinical, economical, and humanistic outcomes of patients
   d. **Use communications skills in educating and counseling patients**
      i. Set the stage
      ii. Establish rapport
      iii. Elicit information from the patient, care-givers, or family
      iv. Provide information to the patient, care-givers, or family
      v. Organize the encounter
      vi. Encourage patient participation
      vii. Demonstrate sensitivity to and adjustment of communication based on contextual or cultural factors, including health literacy, literacy, cognitive impairment, etc.
      viii. Conclude the encounter

3. **Ethics** – The student shall practice pharmacy in a professional, moral, and ethical manner. The student shall identify, analyze, resolve and prevent ethical dilemmas within the context of their professional and personal judgment.

4. **Professionalism, Service, and Leadership** – The student shall provide service and leadership to the profession and the community, with special effort directed toward indigent areas and in communities with health disparities. The student shall demonstrate leadership skills that will enable them to mentor other students and supervise pharmacy staff. The student shall dress professionally and demonstrate professional attitudes, behaviors, and skills.
   a. Display professional attitudes when engaging patients, health-care professionals, colleagues, and care-givers
   b. Dress professionally when engaging patients, health-care professionals, colleagues, and care givers
c. Communicate professionally when engaging patients, health-care professionals, colleagues, and care-givers

5. **Life-Long Learning** – The student shall maintain competence in a dynamic profession through self-initiated learning by identifying and analyzing emerging issues, products and services, employing the attitudes, skills and behaviors associated with life-long learning.
   a. *Participate in self-learning activities*
      i. Determine which literary or internet resources are appropriate when researching an assigned topic
      ii. Accurately interpret data, literature, cases, or other forms of assignments with/without the provision of a didactic component
      iii. Provide an oral or written interpretation of an assignment with/without the provision of a didactic component
      iv. Keep abreast of current developments within the profession
   b. Participate in mentorship activities

6. **Information Management** – The student shall interpret and evaluate data for feasibility, accuracy, and reliability of information.
   a. Collect and interpret relevant data (drug information/literature)
   b. Interpret drug, disease, and patient information to determine if and how a patient’s undesirable signs and symptoms are caused directly by a drug which the patient is taking or has recently taken
   c. Interpret drug, disease, and patient information to determine if and how a patient’s undesirable signs and symptoms could be more appropriately treated with drug therapy or by halting drug therapy
   d. Determine if the patient has an unrecognized disease which requires treatment
   e. Determine if the patient is experiencing side effects which require additional drug therapy
   f. Determine whether patient requires preventive drug therapy
   g. Determine whether the patient requires additional drug therapy to augment or potentiate primary drug therapy

7. **Cultural Competence** – The student shall demonstrate comprehension of and sensitivity to issues regarding cultural diversity, employing professional attitudes, behaviors, and skills.
   a. Display sensitivity to issues regarding beliefs, values, traditions and practices of a culture;
   b. Demonstrate sensitivity toward cultural attitudes regarding seeking help from health care providers
   c. Identify culturally-defined, health-related needs of individuals, families and communities;

**Outcome Objectives for the First-Year Introductory Pharmacy Practice Experience (P1):**
- The practice of Pharmaceutical Care: its structure and function
- Pharmaceutical Care and Pharmacist Services
- Pharmacist-patient relations: How does it affect communications?
- Pharmacist Professionalism
- Building working relationships with providers
- Conducting patient interviews to obtain patient information
- Creating patient profiles using information obtained
- Different roles of a pharmacist
- Communicating with patients and other health-care providers
- Provide pharmaceutical care ethically and compassionately
- Different pharmacy organizations
- Participating in educational offerings designed to benefit the health of the general public
- Providing point-of-care and patient-centered services
- Billing third parties for pharmacy services

Outcome Objectives for the Second-Year Introductory Pharmacy Practice Experience (P2):
*Please note: competencies acquired in P1 experiences will be still be enforced.*

- Processing and dispensing new/refill medication orders
- Verification of an accurate prescription order
- Product selection/substitution
- Performing calculations required to compound, dispense and administer medications
- Filling a prescription
- Decision-making and bias
- Using appropriate sources of information
- Discuss patient and disease factors that influence drug selection (e.g., allergy, disease state, or medication history
- Medication errors and prevention
- Collect accurate and comprehensive drug information from appropriate sources.
- Identify the patient’s primary complaint(s) and reason(s) for seeking medical care.
- Identifying patient-specific factors that affect health, pharmacotherapy, and/or disease state management

Student Accountability / Grading
IPPE Summer Experience has been designated as a graduation requirement for the professional Doctor of Pharmacy program. These courses are graded using a point system resulting in objectives Achieved, Not Achieved or Not Applicable. Failure to satisfactorily complete each year’s IPPE requirements will result in a grade of Incomplete (I) and will prohibit progression to the final year’s experiential clerkship rotations. Also, no student will advance with more than two (2) objectives on the Preceptor Evaluation Form graded as Not Achieved. Each year’s IPPE requirements should be completed in sequence.

Attendance/Tardiness
Please note: The students must complete 160 hours of IPPE experience in the P2 year and the hours will be documented by the preceptor. Failure to miss hours due to tardiness or no show will result in a grade of incompletion and the student must make up those hours missed at a different time during the same semester permitting space and availability.
Students who fail to make-up the missed hours within the same semester, will NOT proceed to the fall semester (IPPE III in the Fall of 2011).
In case of an emergency: an official excuse must be obtained from the Student Affairs Office and the missing hours must be achieved within the same semester permitting space and availability.

Dress Code:
The dress code is intended to contribute to the overall professional development of the pharmacy student. The purpose of the dress code is to make the student aware that there is a standard of professional dress that should be adhered to, in order to have a more effective transition into the professional world. In addition, the dress code is intended to improve the overall appearance of students enrolled in the College.

The following code will be in place on a daily basis for professional students in years 1, 2, 3, 4.

Male: A tie with appropriate shirt. Jeans, tennis shoes are not acceptable. Socks are required.
Female: A dress, skirt/blouse or dress pants are required. Tennis shoes, jeans, low cut blouses are not allowed.

At no time will the following items of clothing be allowed.
(hats, flip flops, sweat suits, shorts, tank tops or athletic T-shirts, holes/cuts in clothing, suggestive or inappropriate slogans on clothing, sandals.)

Academic Dishonesty Policy
It is the policy of the College of Pharmacy that academic dishonesty is inconsistent with good professional behavior. The College of Pharmacy has the responsibility of preparing students to enter a profession in which honesty is of the utmost importance. The pharmacist is viewed as one of the most trusted of professionals and students must understand the importance of being honest and trustworthy in all aspects of the profession. Accordingly, the penalty for academic dishonesty is severe and may include permanent dismissal from the College of Pharmacy.

Description of Student Requirements

1. IPPE Summer Experience Assignments

2. Preceptor’s Evaluation Form
This form must be given to the organization’s supervisor. Request that it be completed and mailed back or faxed to the Director of IPPE within one week of completion of the Professional Service Experience.

3. Journal Entries
The purpose of the journal entries is to keep a vivid, chronological log of student’s experiences, insights, and feelings. The entries will provide the information needed to complete the written reflection. The student will make an entry each time after visiting the site. The student should include a summary of what was done that day and plans for the next visit. Students must make the entries immediately following the visit.
• Entries may be handwritten or typed
• Entries should be descriptive
• The number of entries should correspond to the number of service visits
• Begin by recording the date and the number of hours spent at the site.
• Preceptor must initial each experience at the end of the day
• Entries must be written neatly and in an organized fashion