

University of Louisiana Monroe Interprofessional Education Plan

The University of Louisiana Monroe College of Health and Pharmaceutical Sciences recognizes the significance of students from various healthcare professions who are learning about, from and with each other to improve health outcomes. It is our mission to transform students into collaborative members of an interprofessional team by providing high-quality interprofessional learning experiences through didactic, experiential, and special events with an emphasis on values and ethics, communication, teamwork, and mutual respect of others' roles and responsibilities. Our vision is to develop practitioners who are leaders in collaborative practice and are focused on providing quality patient-centered care to meet diverse healthcare needs.

Adapted from the Interprofessional Education Collaborative (IPEC) report, our interprofessional core competencies are listed below:

IPEC Competency 1 Values and Ethics	To prepare our students to work with individuals of other professions to maintain a climate of mutual respect and shared values.
IPEC Competency 2 Roles and Responsibilities	To prepare our students to use the knowledge of one's own role and those of other professions to appropriately assess and address the health care needs of patients and to promote and advance the health of population.
IPEC Competency 3 Interprofessional Communication	To prepare our students to communicate with professionals in health and other fields in a responsive and responsible manner that supports a team approach to the promotion and maintenance of health and the prevention and treatment of disease.
IPEC Competency 4 Team and Teamwork	To prepare our students to apply relationship-building values and the principles of team dynamics to perform effectively in different team roles to plan, deliver, and evaluate patient/population-centered care and population health programs and policies that are safe, timely, efficient, effective, and equitable.

In our existing curriculum, which was implemented in Fall 2009, interprofessional education (IPE) opportunities occurred in the two four-week summer introductory pharmacy practice experiences (IPPEs) in addition to the advanced pharmacy practice experiences (APPEs) during the P4 year. Subsequent to our site visit in 2013, a subcommittee comprised of members of the School's Curriculum and Assessment committees was formed. Members attended seminars and

reviewed literature regarding IPE in health professions. In September 2014, a Joint IPE Task Force (IPETF) of Health and Pharmaceutical Sciences was formed. This task force included the original Pharmacy sub-committee along with key faculty members from other health science professions who were also working on IPE for their respective programs. The task force currently has members from nursing, medical laboratory science, dental hygiene, occupational therapy, radiologic technology, and speech language pathology, in addition to pharmacy. It was decided by the IPETF that the first IPE activity would occur during the spring semester of 2016 with Pharmacy, Nursing and Occupational Therapy taking part, and that other disciplines would join the IPE activities at a later date. The IPETF has been an informal committee since its inception. Current ULM administration has plans to formalize this committee into a college committee.

The Task Force created an IPE Pathway for all healthcare programs (Appendix A) and structured the IPE program in such a way that each successive year builds upon prior years. Sub-committees were formed with different disciplines to develop cases, required readings, team contracts, care plans, reflective writing, and peer evaluations. A shared IPE Moodle Meta-Course was developed where students from all disciplines could be imported and intentionally grouped with members from other healthcare professions for completion of coursework. Coursework included IPE readiness assessments, required readings, assignments, guided (forced) interactions to learn about, from, and with each other via graded Moodle forums.

Lectures were inserted into introductory didactic courses in all healthcare disciplines to “set up” IPE and introduce students to the concepts. In the pharmacy program, IPE was introduced in the “Introduction to Pharmacy” course during the first semester and IPE activities were implemented into selected longitudinal lab sequences (ILS). An overview of IPE is outlined in the ULM School of Pharmacy student manual. Course specifics for IPE are outlined in the IPE course document and is covered in the class in which the IPE activity falls. Mapping of interprofessional objectives to specific healthcare courses can be found in Appendix B.

Didactic

Students participate in IPE 1 during ILS II in the spring of their first year. By the end of IPE 1, enrolled students will compose an appropriate healthcare team, and learn from, with, and about each other’s roles and responsibilities (IPEC Competency 2), as well as concepts of values and ethics (IPEC Competency 1), through face-to-face interaction, activities, and facilitated small-group forum discussions.

IPE begins with all students taking part in a pre-course survey utilizing a compilation of validated IPE surveys (IPEC Competency Self-Assessment Tool V3, SPICE-R tool, and IEPS scale) to assess attitudes, values, beliefs, and perceptions regarding IPE.

Students are then randomly assigned to small groups (approximately 15 participants per group), ensuring that all groups have the same or similar number of participants from a given discipline. Over the course of eight weeks, students complete assigned readings and participate

in face-to-face and online small-group forum discussions. Each week a faculty member, from one of the different participating disciplines, facilitates the online forums and grading. In addition, students are given a clinical case which serves as the basis for additional online discussions. Each student must respond to weekly discussion questions and then reply to discussion questions submitted by a member of the small group from a different discipline. Following completion of the case discussions, students complete a follow-up survey to determine their understanding of IPE and to re-assess attitudes, values, beliefs, and perceptions regarding IPE. The post-course survey tool utilizes the same questions from the pre-course survey, but takes a retrospective pre-post approach in which students rate their abilities twice: once as they recall them prior to training, and again now that training is completed. The results of this approach can allow IPE intervention programs to evaluate the effectiveness of interventions, as well as help individuals to reflect on how training impacts their competencies.

Student grades for the course are based upon completion of four credit/no-credit modules and five graded forum modules. For pharmacy students, IPE 1 is housed in the ILS II course and constitutes 10% of the total lab grade for that semester. IPE 1 was implemented in the Spring of 2016 and again in the Spring of 2017 with pharmacy, nursing, and MOT students. Faculty members from the Interprofessional Education Task Force review data and student comments at the end of each course for continuous quality improvement.

Statistics were calculated for the pre-, post-, and retrospective pre-post surveys completed during spring 2016 IPE 1 and compared using t tests with $\alpha = 0.05$. All responses indicated statistically significant increases in knowledge of IPEC competencies. Comparing retrospective to post-survey responses, there was improvement in students' perceptions of self-efficacy (12.02%), attitudes toward IPE (13.31%), and perceptions of a student's own profession in relation to others (5.58%) with mean scale changes $p < 0.0001$. These changes indicate students' increased understanding of other professions with more accurate reflection of their previous knowledge in IPEC competency areas.

IPE 2 occurs in ILS IV in the spring of the second year. By the end of IPE 2, enrolled students will compose an appropriate healthcare team and learn from, with, and about each other utilizing the concepts of Interprofessional communication (IPEC Competency 3), and teams and teamwork (IPEC Competency 4), through face-to-face interaction, activities, facilitated small-group discussions, reflection, and peer/team evaluations. Each week a faculty member, from one of the different participating disciplines, facilitates the online forums and grading.

Students are randomly assigned to small groups (approximately 7 participants per group), ensuring that all groups have the same or similar number of participants from a given discipline for the eight week course.

The course begins with students collaborating on a team charter. During this encounter, team members discuss their collaborative strengths that can be used to create an effective team. Team members also gain insight of personal limitations and learning barriers. Basic ground

rules are agreed upon and set for expectations and problem solving. Teams are presented with a case and guided questions for discussion, with a focus on communication and teamwork. Students are introduced to the SBAR method of communication and submit an SBAR to a healthcare provider. In addition, the team submits a care plan which includes problems/needs identified, goals, interventions, discipline involvement, and evaluation (follow-up). At the end of the course, individual students submit a guided self-reflection on communication and collaboration, and peer evaluations are completed for teamwork. Students complete a post-course survey utilizing the same tool as used in IPE 1 to determine understanding of IPE, and to assess attitudes, values, beliefs, and perceptions regarding IPE.

Student grades for the course are based upon completion of two credit/no-credit modules, and six graded modules (Team planning; Case discussions; SBAR; Team Care Plan; Reflective writing & Peer Evaluation). For pharmacy students, IPE 2 is housed in ILS IV and constitutes 10% of the total lab grade for that semester.

IPE 2 was implemented in the Spring of 2017 with pharmacy, nursing, and MOT students. Faculty members from the Interprofessional Education Task Force review data and student comments at the end of each course for continuous quality improvement.

IPE 3 will occur in ILS V and ILS VI during the third professional year. By the end of IPE 3, enrolled students will practice as a member of a healthcare team, to learn from, with, and about each other utilizing all four IPEC Competencies (Values and Ethics; Roles and Responsibilities; Interprofessional Communication; and Teams and Teamwork) in one or more special events.

Planning is currently underway and will be phased in during the Fall of 2018 and Spring of 2019. This is a one-year delay from the original implementation date of Fall 2017/Spring 2018. The IPETF decided to delay implementation of phase 3 in order to re-evaluate the inclusion of prescribers into the course, and to develop purposeful special events. Original plans included students from the new University of Louisiana Monroe Nurse Practitioner program serving as prescribers for teams. Subsequent plans depended on students from the new NYIT Doctor of Osteopathic Medicine School participating in the course, with medical students serving as prescribers. We have since learned that the NYIT program will not be expanding their offerings in Louisiana.

The IPETF will be tasked with developing:

- 1) a solution for prescribers to be incorporated into the third-year IPE course
- 2) meaningful special events in which students can meet objectives of IPE 3 (e.g. student led co-seminars, emergency preparedness events, health fairs, modification of tent triage, etc.)
- 3) assessment methods for the course including the Interprofessional Collaborative Competency Attainment Survey (ICCAS) and observational assessment tools.
- 4) a guidance document for each event

The original phase-in plan has been adjusted to reflect the delay and the plan includes current disciplines (pharmacy, nursing, and MOT students) and can be updated as new disciplines participate.

Experiential Practice

Interprofessional education is introduced, reinforced, and practiced in the didactic and introductory pharmacy practice experiences and demonstrated in advanced pharmacy practice experiences. During practice experiences, students must participate as a healthcare team member to provide direct patient care and engage in shared therapeutic decision-making with prescribers and other healthcare team members. Standardized assessment questions related to IPE are incorporated into each student evaluation and focus on teamwork, communication, and professionalism.

Teamwork	Does the student collaborate as a member of an interprofessional team by demonstrating mutual respect, understanding, and values to meet patient care needs?
Communication	Does the student effectively communicate verbally and nonverbally when interacting with an individual, team or organization?
Professionalism	Does the student exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society?

We feel that reflection is the cornerstone to becoming a successful healthcare provider and is essential for becoming an effective member of an interprofessional team. During the community IPPE at the end of the first year, each student is required to complete a personal writing assignment that reflects on interprofessional education. Students are required to discuss with their preceptor a time when he/she was able to work closely with another healthcare provider to provide patients with the highest level of care or a time when they experienced a challenging encounter with a fellow healthcare provider. In the reflective writing, students must reflect upon the roles and responsibilities of healthcare providers, what made the encounter beneficial or difficult, and how each discipline worked together to provide the best healthcare possible for the patient. If the encounter was difficult, how was the challenge solved and what suggestions did the preceptor share regarding handling difficult situations. At the conclusion of the institutional IPPE at the end of the second year, each student is required to complete a second personal writing assignment reflecting on interprofessional education. In this reflective writing, students must focus on how they or someone else in their profession was able to work closely with another healthcare discipline and define the roles and responsibilities of each during the encounter. They must also explain how each discipline successfully communicated and how trust and respect was demonstrated between the disciplines.

In addition to the guided reflective writings during IPPEs, our students also report significant opportunities to interact and communicate with other healthcare providers during these practice experiences. All experiential students are required to complete a preceptor, site, and course evaluation after each practice experience. Questions to assess the degree and impact of IPE were incorporated into each of these evaluations. During the 2017 IPPEs, 93% of students stated they had the opportunity to interact with other healthcare providers and 94% of these students had the opportunity to do so multiple times per week. Ninety-seven percent reported communicating with patients and other healthcare providers with 95% doing so multiple times per week.

During APPEs students must participate as a healthcare team member to provide direct patient care and engage in shared therapeutic decision-making with prescribers and other healthcare team members. Students are required to complete longitudinal assignments and activities across the fourth year and performance is assessed by preceptors. All APPE students are required to complete two faculty rotations with 95% of those experiences occurring in a teaching institution with significant healthcare interactions.

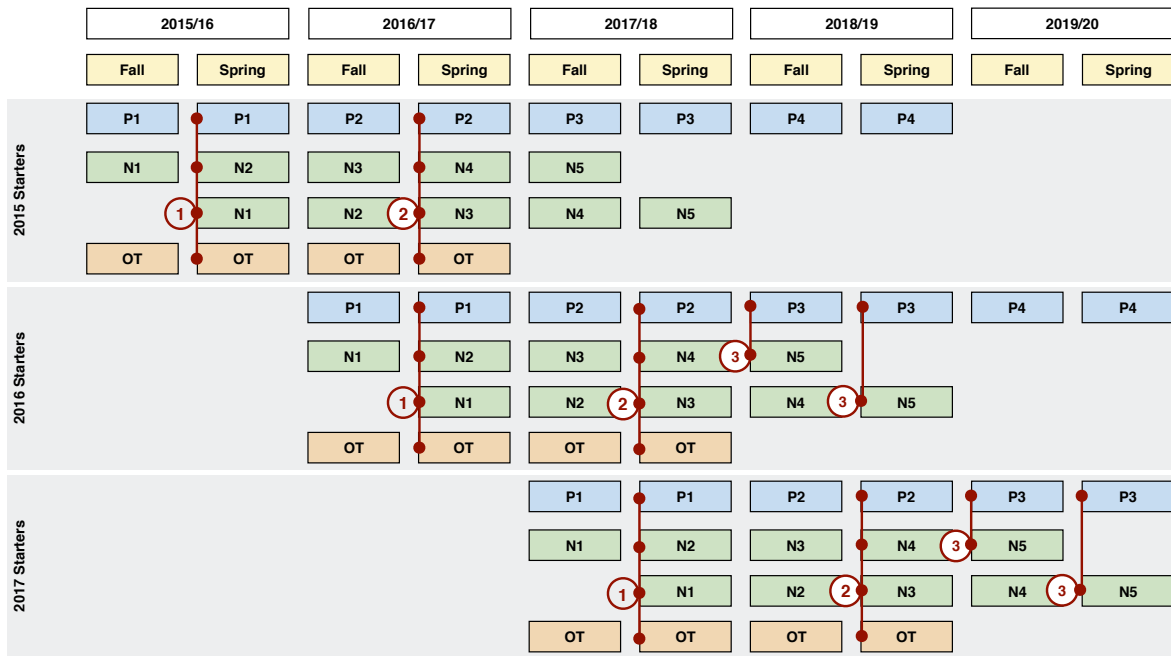
During the 2016-2017 APPE year 100% of all patient care experiences allowed students to participate as a member of an interprofessional team with 99% participating multiple times per week. Approximately 99.5% of all patient care experiences allowed students to identify, evaluate, and communicate to the patient or other health care professional the appropriateness of the patient’s specific pharmacotherapeutic agents, dosing regimens, dosage forms, routes of administration, and delivery systems multiple times per week. The 2016 AACCP standardized student survey also revealed 100% of our graduates felt their APPEs allowed collaboration with other healthcare providers. In a recent survey looking at prescriber interaction, 96% of students reported physician interaction during their adult medicine experiences.

Beginning in May 2018, all APPE students will be required to complete the Interprofessional Collaborative Competency Attainment Survey (ICCAS) at the end of each clinical rotation to self-assess individual achievement of interprofessional care competencies.

Summary of IPE Assessment			
Tool	Description	Individual/Team Assessment	Curricular Location
IPEC Competency Self-Assessment Tool V3	Self-assessment of the achievement of the competencies defined by IPEC	Individual	IPE 1 (Pre, Post, and Retrospective) IPE 2 (Post)
Interdisciplinary Education Perception Scale (IEPS)	Assess student perceptions of interprofessional experiences	Individual	IPE 1 (Pre, Post, and Retrospective) IPE 2 (Post)

Students' Perceptions of Interprofessional Clinical Education Revised (SPICE-R)	Assess health professions students' perceptions of interprofessional education and interprofessional collaborative practice	Individual	IPE 1 (Pre, Post, and Retrospective) IPE 2 (Post)
SBAR rubric	Assess students' interprofessional communication skills	Team	IPE 2
Team Charter	Assess team collaboration skills	Team	IPE 2
Patient Care Plan rubric	Assess team ability to identify problems/needs, goals, intervention, appropriate disciplines involved, and follow-up	Team	IPE 2
Reflection rubric	Self-reflection focusing on identified IPEC competencies per course	Individual	IPE 2 IPPE 1 IPPE 2
Peer evaluation	Assess members of healthcare team in the areas of effort, contribution, support of group process, communication, and attendance	Individual	IPE 2
Interprofessional collaborative competency attainment survey (ICCAS)	Self-assessment of achievement of interprofessional care competencies; evaluates all 4 IPEC domains	Individual	IPPEs/APPEs (Post) IPE 3
Preceptor evaluation of student	Assess students' ability to participate in interprofessional practice	Individual	IPPE APPE

IPE Implementation - Year 4



1 Roles and responsibilities Values and Ethics
 Moodle forum discussion based on articles, videos, blogs, etc; discussion question prompts written by instructors

2 Communication Teams and Teamwork
 Moodle forum discussion based on articles, videos, blogs, etc; discussion question prompts written by instructors

3 All IPEC Competencies - Special Event
 IPE3 Events will be offered in the Fall and Spring beginning Fall 2018.

College of Health and Pharmaceutical Sciences IPE Map					
Year	Interprofessional Objectives	Nursing	Occupational Therapy	Pharmacy	*Physical Therapy **Others
1	<p>By the end of the IPE 1 course, students will learn with, from and about each other in order to:</p> <ul style="list-style-type: none"> • Compare and contrast unique roles and responsibilities of health professions comprising an interprofessional team, and how those roles complement each other • Define professionalism and describe national standards related to professional conduct for healthcare providers • Discuss situational management strategies for each of the healthcare professionals described in an ethical dilemma in a multidisciplinary case • Reflect upon one's own attitude, values, beliefs, and perceptions regarding interprofessional education and practice, prior to and after the completion of the course 	<p>NURS 3011- Nursing Synthesis 1</p> <p>NURS 2009- Fund. of Professional Nursing</p>	<p>OCCT 5080- Applied Reasoning and Theory</p>	<p>PHRD 4049- Integrated Lab Sequence II</p> <p>PHRD 4010- Introduction to Pharmacy</p>	TBA
2	<p>By the end of the IPE 2 course, students will learn with, from and about each other in order to:</p>	<p>NURS 3030- Nursing Synthesis 2</p>	<p>OCCT 5180- OT Management</p>	<p>PHRD 4099- Integrated Lab Sequence IV</p>	TBA

	<ul style="list-style-type: none"> • Discuss team dynamics and communication skills when given a multidisciplinary case • Organize and communicate information to other healthcare team members utilizing SBAR format • Create a team care plan for a patient given a multidisciplinary case • Provide and accept feedback from peers through examination of one's own performance as an individual, AND as a part of a team, recognizing the strengths and weaknesses of each • Reflect upon one's own attitude, values, beliefs, and perceptions regarding interprofessional education and practice after completion of the course 	NURS 4002- Nursing Synthesis 3			
3	<p>By the end of the IPE3 course, students will learn with, from and about each other in order to:</p> <ul style="list-style-type: none"> • Collaborate as a member of an interprofessional team by demonstrating mutual respect, understanding, and values to meet patient care needs • Effectively communicate verbally and nonverbally when interacting with an individual, team or organization • Provide and accept feedback from peers and team members 	NURS 4067- Public Health Nursing	OCCT 5180- OT Management	PHRD 5020- Integrated Lab Sequence V PHRD 5049- Integrated Lab Sequence VI	TBA

	<ul style="list-style-type: none"> • Reflect upon one’s own attitude, values, beliefs, and perceptions regarding interprofessional education and practice after completion of the course 				
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*Program in development and is intended to launch Fall 2019 pending Louisiana Board of Regents approval.

** Other healthcare programs will participate upon petitioning to the IPE Committee

In addition to the above, the following interprofessional objectives are met during pharmacy practice experiences:

School of Pharmacy IPE Map		
Year	Interprofessional Objectives	
IPPE	<ul style="list-style-type: none"> • Reflect upon one’s own attitude, values, beliefs, and perceptions regarding interprofessional education and practice after completion of the course • Collaborate as a member of an interprofessional team by demonstrating mutual respect, understanding, and values to meet patient care needs • Effectively communicate verbally and nonverbally when interacting with an individual, team or organization • Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society 	PHRD 4050- IPPE Community
IPPE	<ul style="list-style-type: none"> • Reflect upon one’s own attitude, values, beliefs, and perceptions regarding interprofessional education and practice after completion of the course • Collaborate as a member of an interprofessional team by demonstrating mutual respect, understanding, and values to meet patient care needs • Effectively communicate verbally and nonverbally when interacting with an individual, team or organization 	PHRD 5000- IPPE Institutional

	<ul style="list-style-type: none"> Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society 	
APPE	<ul style="list-style-type: none"> Collaborate as a member of an interprofessional team by demonstrating mutual respect, understanding, and values to meet patient care needs Effectively communicate verbally and nonverbally when interacting with an individual, team or organization Exhibit behaviors and values that are consistent with the trust given to the profession by patients, other healthcare providers, and society 	<p>PHRD 6000 – APPE Community</p> <p>PHRD 6002- APPE Institutional</p> <p>PHRD 6004- Ambulatory Care</p> <p>PHRD 6006- Adult Medicine</p> <p>PHRD 6008- Patient Care Elective I</p> <p>PHRD 6010- Patient Care Elective 2</p> <p>PHRD 6012- Patient Care or Non-Patient Care Elective</p>