

APPE Readiness Plan Doctor of Pharmacy Program

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The University of Iowa College of Pharmacy defines Advanced Pharmacy Practice Experience (APPE) readiness as a holistic concept requiring knowledge-, skills-, and behavior-based competencies. The **APPE-Readiness Plan** includes a mix of assessments and metrics embedded throughout the first (P1) through third (P3) professional years.

The APPE Readiness Plan establishes a specific "Readiness Standard" for each parameter. Sustained struggles in one area or a combination of several deficits may signal concerns regarding a student's ability to succeed on APPEs. Assessment data related to readiness will be monitored over time to determine if APPE Readiness Plan modifications are needed.

Information outlined in this plan is collected by the **Office of Professional Education** (OPE) and may be utilized by the following individuals or groups:

Individual/Group	Purpose
Individual student	Track progress in APPE Readiness measures
Assessment Committee	Monitor the effectiveness of the curriculum and program in preparing students to enter APPEs
Student Success and Progression Committee	Support student success
Progression Committee	

APPE Readiness Plan Workgroup

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I. Course Success and Progression

Course Success and Progression is essential for student success and APPE-readiness. Thresholds for didactic and experiential course performance and progression from semester-to-semester and academic year-to-academic year have been established by the Doctor of Pharmacy program. Failure to meet minimum passing thresholds per course, or a pattern of academic weakness in courses will result in academic warning, academic probation, and/or dismissal per the Academic Progression Policy.

To maximize the chance of APPE success, it is strongly advised that students receiving grades less than C- in any course or assessment develop their own plan for improvement to strengthen knowledge and skills in applicable areas.

Readiness Standard

→ Course Grade: C- or above and/or P (pass) in each course

II. Assessment of Knowledge

A. Key Drugs

The **Key Drugs Examination** is a programmatic assessment administered at the end of each semester during the P2 and P3 academic years. Students are assessed on drug name (generic and brand), therapeutic class/pharmacologic category, common conditions/indications, mechanism of action, boxed warnings/precautions, and counseling points such as side effects from a specified list of agents including pertinent prescription (oral and intravenous) and non-prescription products. The content of each exam is detailed below.

Semester	Examination Content
P2 Fall	70-90%: Drugs covered in that semester's courses
P2 Spring	10-30%: Drugs covered in previous courses
P3 Fall	
P3 Spring	Drugs from all courses

Students performing below the standard after two attempts will complete a remediation process prior to the start of the next semester.

Readiness Standard

- → P2 Key Drugs Examinations (Fall and Spring): 70%
- → P3 Key Drugs Examinations (Fall and Spring): 75%

B. Pharmacy Calculations

Competence in performing pharmacy calculations is essential for APPEs and pharmacy practice and is an expectation of the pharmacist licensure examination. **Pharmacy calculations examinations** are administered in each semester of the Pharmacy Practice course series. Students must meet the readiness standard within two attempts. Students performing below the standard after two attempts will complete a remediation process prior to the start of the next semester.

Readiness Standards

- → P1 Pharmacy Calculations Examinations (Foundations of Pharmacy Practice I & II): 70%
- → P2 Pharmacy Calculations Examinations (Applications of Pharmacy Practice I & II): 75%
- → P3 Pharmacy Calculations Examinations (Applications of Pharmacy Practice III & IV): 80%

C. Introductory Pharmacy Law Examinations

Students benefit from early exposure and the opportunity to observe how the law is applied in everyday pharmacy practice in the workplace and during Introductory Pharmacy Practice Experiences (IPPEs). Through these experiences, students gain knowledge prior to the Law and Ethics course delivered in the P3 Spring semester. Given the importance of law in pharmacy practice, students will take an examination covering assigned law material at the end of the P1 and P2 academic year. Students performing below the standard after two attempts will complete a remediation process prior to subsequent IPPEs and/or the start of the next semester, whichever comes first.

Readiness Standards

→ P1 Introductory Pharmacy Law Examination: 75%

→ P2 Introductory Pharmacy Law Examination: 75%

D. Knowledge Examinations

Knowledge Examinations are comprehensive and assess the student's ability to retain key information from the curriculum. These occur at the end of the P1 and P3 years. Students will take each exam once. Students performing below the readiness standard may be required to meet with the Office of Professional Education to develop a self-directed review plan.

Readiness Standards

→ P1 Knowledge Examination: 60%→ P3 Knowledge Examination: 60%

E. IPPE Preceptor Evaluation of Student: Foundational Knowledge

Students are evaluated by preceptors on their ability to apply knowledge in foundational sciences to solve healthcare problems and their ability to critically analyze scientific literature related to drugs and diseases. Students performing below the readiness standard will meet with the Course Coordinator to discuss a plan for improvement.

Readiness Standards

- → IPPE Community: Foundational Knowledge domain above "Needs Significant Improvement."
- → IPPE Hospital: Foundational Knowledge domain above "Needs Significant Improvement."

III. Assessment of Skills

A. Pharmacy Practice Series: Skills

Multiple practice skills are taught, practiced, and assessed as a component of the Pharmacy Practice course series. Planned repetition is essential for students' readiness to both perform and enhance their practice skill proficiency during their Advanced Pharmacy Practice Experiences (APPEs).

Students have appropriate repetition (as indicated below) throughout the course series to prepare them to perform these skills on their APPEs.

Readiness Standards

→ Fingerstick: 5 repetitions

→ Blood pressure and pulse: 5 repetitions

→ Immunization injection technique: 3 repetitions

→ Written communication: SOAP Note: 4 repetitions

- → Collect patient medication history: 4 repetitions
- → Prescription verification: 4 repetitions
- → Prescription counseling: 8 repetitions
- → Patient triage/self-care counseling: 7 repetitions

B. IPPE Preceptor Evaluation of Student: Patient Care

Students are evaluated by preceptors on their ability to collect and interpret patient information, interview patients, and promote health and wellness. Students performing below the readiness standard will meet with the Course Coordinator to discuss a plan for improvement.

Readiness Standards

- → IPPE Community: All ratings in Patient Care domain above "Needs Significant Improvement."
- → IPPE Hospital: All ratings in Patient Care domain above "Needs Significant Improvement."

IV. Assessment of Attitudes & Behaviors

Professionalism is an integral component of APPE-readiness. Healthcare providers are held to the highest standard of ethical conduct and must possess exceptional character, honesty, and integrity. Specific domains assessed to determine APPE-readiness include social skills, reliability and dependability, professionalism, and ethical responsibility to self and others. If concerns are identified in the areas below, the student meets with the course coordinator and/or Associate Dean of Student Affairs to discuss a plan for improvement.

A. Pharmacy Practice Series: Accountability Parameters

The practice laboratory simulates the pharmacy workplace and accountability expectations mirror the pharmacy workplace, regardless of practice setting. Like their future jobs, students are expected to be in attendance and ready to learn, communicate transparently regarding their learning needs, and adhere to deadlines.

Readiness Standards

- → No greater than 2 late assignments per semester
- → No more than 2 missed lab sessions (excused or unexcused) per semester

B. Introductory Pharmacy Practice Experiences: Accountability Parameters

Because of the direct relationship between Introductory Pharmacy Practice Experiences (IPPEs) and future APPE readiness, the following indicators of success during IPPEs are monitored.

Readiness Standards

- → Timely completion of all pre-rotation requirements
- → Timely completion of all assignments
- → Completion of all required experiential hours as scheduled
- → No preceptor or course coordinator concerns during any IPPE related to accountability or professionalism such as attendance, timeliness, attitudes, behaviors, or receptiveness to feedback.

C. Ad-hoc Report of Concerns

Faculty, staff, and students may document observations and/or concerns regarding student attitudes, behaviors, and professionalism. These data are kept in a separate confidential file by the Associate Dean of Student Affairs who will tailor follow-up with faculty and/or students as appropriate for the concern.

Readiness Standards

→ No reports of concern

SUMMARY: APPE READINESS MINIMUM STANDARDS

The following performance information is collected by the Office of Professional Education (OPE) on behalf of the Assessment Committee. Sustained struggles in one area or a combination of several deficits may signal concerns regarding a student's ability to succeed on APPEs.

	P1 \	/ear	P2 Year		P3 Year		Student Improvement Disp
	Fall	Spring	Fall	Spring	Fall	Spring	Student Improvement Plan
OVERALL							
Course Grades (required courses)			Self-review of material				
KNOWLEDGE							
 Introductory Pharmacy Law Examination 		75%		75%			1 Retake - must pass or remediate prior to IPPE or start of next semester ¹
 IPPE² Preceptor Evaluation of Student: Foundational Knowledge Domain 			Needs Improvement				Meet with Course Coordinator
Key Drugs Examination			70%	70%	75%	75%	1 Retake - must pass or remediate prior to start of next semester ¹
Knowledge Examination		60%				60%	Self-review of material
Pharmacy Calculations Examination	70%	70%	75%	75%	80%	80%	1 Retake - must pass or remediate prior to start of next semester ¹
SKILLS							
 IPPE² Preceptor Evaluation of Student: Patient Care Domain 			Needs Improvement				Meet with Course Coordinator
Pharmacy Practice Series: Skills ³			Individualized work with instructors as needed				
ATTITUDES & BEHAVIORS							
 IPPE Accountability and Professionalism Re-schedule needed – pre-work delays Not completing required experiential hours Not completing assignments Noted professionalism concerns 			Meet with Course Coordinator. For repeated concerns: Meet with Associate Dean of Student Affairs or designee				
 Pharmacy Practice Series Accountability and Professionalism Late assignments Absences 	< 3 of each	< 3 of each	< 3 of each	< 3 of each	< 3 of each	< 3 of each	Meet with Course Coordinator
 Ad-hoc Reporting of Concerns (on file) 			Meet with Associate Dean of Student Affairs or their designe				

¹ Students who do not complete remediation will meet with the Associate Dean of Student Affairs or their designee.

² IPPE Community or IPPE Hospital only

³ Not collected by OPE