



# Departments of Pharmacy Practice & Biomedical Pharmaceutical Sciences /Skaggs School of Pharmacy /Doctor of Pharmacy (PharmD Degree Program) AY 2022-23 Assessment Report

All areas shaded in *gray* are to be completed by the department/program.  
This document will be posted online and must be [accessible electronically](#) (including appendices).

## MISSION STATEMENT

### Skaggs School of Pharmacy

To prepare graduates to be highly skilled scientists, educators, and patient-centered health care providers. To advance scientific knowledge through research and graduate education ranging from bench to bedside. To promote life-long learning, community service, social responsibility and interprofessional collaborative practice, and to foster cultural sensitivity in all graduates. To prepare graduates to be highly skilled scientists, educators, and patient-centered health care providers. To advance scientific knowledge through research and graduate education ranging from bench to bedside. To promote life-long learning, community service, social responsibility and interprofessional collaborative practice, and to foster cultural sensitivity in all graduates.

### Doctor of Pharmacy Program (Approved Jan 17, 2018)

The mission of the Doctor of Pharmacy Program is to prepare future pharmacists, in both formal and informal learning environments, to provide patient-centered and population-based care and to manage the systems within which pharmacists work while fostering professionalism, leadership and advocacy, interprofessional collaboration, self-directed learning, cultural competency and scholarship.

### Doctor of Pharmacy Program and Student Outcomes

In achieving the mission of the Doctor of Pharmacy Program, graduates will have the ability\* (knowledge, skills, attitudes and values) to:

#### I. Provide patient-centered care

- I. A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences
- I. B. Ensure optimal pharmacotherapy for patients

#### II. Communicate effectively with patients, families, caregivers, and health care professionals

#### III. Use critical thinking and problem-solving skills to enhance patient care

#### IV. Work effectively within an interprofessional team

#### V. Manage and use resources of the health care system for the benefit of individual and public health

- V.A. Promote patient and public safety
- V.B. Perform quality assurance techniques to improve the medication use system and the health care system
- V. C. Seek to reduce health care disparities

#### VI. Efficiently utilize information resources and technology

- VI.A. Identify, retrieve and interpret relevant professional literature
- VI.B. Communicate evidence-based information to other health care providers, patients, and the public

#### VII. Promote the public's health

- VII. A. Promote health improvement, wellness, and disease prevention
- VII.B. Raise awareness of and contribution to solutions of public and population health issues

#### VIII . Practice professionally

- VIII.A. Apply legal, ethical, social, and economic principles to practice
- VIII.B. Respond to patients' needs in a culturally-sensitive manner
- VIII.C. Apply practice standards to optimize patient care
- VIII.D. Maintain professional competence by becoming a self-aware and self-directed learner

**IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession.**

**X. Engage in scholarly activity**

- X.A. Use a scholarly approach to become an agent of change to advance pharmacy practice
- X.B. Demonstrate skills and a commitment to life-long learning

## **DEPARTMENT ALIGNMENT WITH PRIORITIES FOR ACTION**

After listing each departmental objective, indicate which of the five [Priorities for Action](#) the objective supports. In this section, you may also briefly describe any innovative or noteworthy programs/initiatives that support the Priorities for Action.

1. **Create learning experiences that promote the students' development of their knowledge of the underlying biomedical, pharmaceutical, social-behavioral, administrative, and clinical sciences, and the development of their skills in team-based patient care and pharmacy-related services.**

**PLACE STUDENT SUCCESS AT THE CENTER OF ALL WE DO:** Students receive individualized, tailored academic advising prior to applying for the professional program and throughout their time in the Pharm.D. program. Performance throughout the program is monitored by the School's student services office to ensure students are progressing towards graduation. This office also provides guidance for services related to personal, financial or medical health issues. Faculty are encouraged to help identify students who are struggling as early as possible to allow for accommodation or remediation as needed. In addition to required coursework, students have access to additional elective courses and additional training in complementary fields through dual degree and certificate options in business, public health and pharmaceutical sciences drug design program. Students who complete the first two professional years may now apply for a BS Pharmacy degree. They cannot get licensed as a pharmacist with the BS degree, but they can apply for graduate programs including three dual degree programs (PharmD-MBA; PharmD-MPH, and PharmD-MS-in-PSDD). Students are represented in various School committees and encouraged to share their ideas and concerns at all times. In addition, students receive information and support for pursuing post-graduation training in pharmacy residencies, fellowships, and graduate programs. The increased number of APPE hours in the final year of the program now make graduates eligible for licensure in all states. The return to in-person class time has also facilitated efforts to monitor student well-being and encourage learning.

**DRIVE EXCELLENCE AND INNOVATION IN TEACHING, LEARNING, AND RESEARCH:** Students in the Pharm.D. program have opportunities to work with researchers in both departments to gain first-hand knowledge of the research process including lab-based experiences and clinical case studies. Writing and public speaking skills are practiced repeatedly throughout the program to ensure skills are refined and professional. The School continues to provide interprofessional education activities to assist with the development of team and communication skills. An updated curriculum is now implemented and the School is revising its methods for assessing student learning in that new curriculum. The addition of virtual/augmented reality into instructional methods occurred in one of the biomedical-oriented courses. The expansion of the number of credit hours and time students spend in their final year of the program when they are placed in patient care sites for experiential courses continues to ensure the students have more time to develop and demonstrate their level of independence and competence in their work.

**EMBODY THE PRINCIPLE OF "MISSION FIRST, PEOPLE ALWAYS:** As already described above, the School provides strong support for students in the program to ensure they progress. This support includes responding to concerns and requests in a timely manner. Student input has been proactively sought and used to guide decisions about building

access, use of remote teaching technologies, and other activities during and after the pandemic. Professionalism in interactions among students, with faculty, and the community including patients is always monitored and failures to behave professionally addressed through the professionalism policy. Many students experienced two years of pandemic education methods and the return to in-person courses has been a welcomed change for most. The end of pandemic limitations has also allowed students in their final year practicums (APPEs) to experience more direct face-to-face patient care in a more typical practice environment. Faculty have also found new skills for combining in-person and remote teaching and identifying where they are most appropriately used to facilitate learning.

**PARTNER WITH PLACE:** The curriculum contains a number of courses and activities in which students interact with the general public and other healthcare students and professionals. These include service-learning projects focused on health and wellness in the first year, several embedded introductory pharmacy practice experiences (IPPEs) and separate IPPE courses that require interacting with members of the community and healthcare providers during the didactic years, and an entire year of practicum-style advanced practice experiences (APPEs) in Montana as well as other states and countries. In addition to courses, students have multiple options for co-curricular/extracurricular activities such as a state-wide screening program (IPHARM), wellness fairs sponsored by community groups, influenza vaccination events, and most recently, mass vaccination clinics for Covid-19. The pandemic did create some barriers to usual practice when working with community or patient groups. Adjustments were made to ensure best learning experiences including remote videoconferences and telehealth methods. The current Fall 2022 semester has seen a return to normal practice experiences and the return of more in-person community events.

2. **Provide opportunities to apply classroom and laboratory knowledge and skills in patient care settings in supervised experiential courses.**

**PLACE STUDENT SUCCESS AT THE CENTER OF ALL WE DO:** The number of hours P4 students spend in direct patient care experiences (APPEs) in healthcare settings remains at the increased level of 1680hr and increased length of each placement from 4 to 6 weeks to provide additional time for the student to refine their skills and build their confidence and independence. Achievement is measured using entrustable professional activities (EPA) style levels that indicate level of supervision needed to complete an action. The expected level by graduation for key professional activities is an EPA is 4 which is equivalent to level of independent performance one would expect of a licensed pharmacist.

**EMBODY THE PRINCIPLE OF “MISSION FIRST, PEOPLE ALWAYS”:** Student placements in healthcare sites is tailored to the interests of the students and allows some time for elective placements so they can explore areas of pharmacy practice further. Experiential rotations also place students with patients from urban and rural areas to further improve their knowledge of the issues and concerns that come from living in less densely populated areas, variety of socio-economic levels, and different health literacy levels. The pandemic did eliminate international placements and some domestic placements. These will begin to be re-instituted in Summer 2023.

**PARTNER WITH PLACE:** All required APPE placements are within the state so students provide care to Montana residents for most of their final (P4) year. Elective placements allow students to work with communities outside of the state, if that is what they opt to do. Many of the training sites have long term relationships with the School and provide placements and supervision of pharmacy students each year. The School and training sites worked together during the pandemic to ensure the best possible learning experiences in spite of Covid-19 barriers. As already mentioned, there is a return to more normal experiences for students starting this year.

3. **Provide opportunities for students to actively participate in community and campus organizations and agencies through committees, student organizations, and service learning projects.**

**PLACE STUDENT SUCCESS AT THE CENTER OF ALL WE DO:** To ensure all students have opportunities to engage in a variety of experiences outside of the classroom and laboratory courses, efforts have been made to provide a long list of options. Some additional interprofessional experiences have been added to the curriculum. These experiences further prepare the students to be ready to practice pharmacy in a variety of populations. The pandemic limited community event participation but also led to some innovative uses of videoconferencing and telehealth modalities to connect with others. Now that the restrictions due to Covid-19 have ended, there has been a noticeable increase in the number of in-person events for students in Fall 2022 semester.

**DRIVE EXCELLENCE AND INNOVATION IN TEACHING, LEARNING, AND RESEARCH:** New accreditation requirements to provide co-curricular and interprofessional experiences that will help develop skills such as leadership, entrepreneurship, cultural humility, and communication have led to increased emphasis and requirement for student involvement in “real world” experiences even though some of those connections were via digital or telehealth methods during the pandemic. Virtual reality (VR) has been introduced into one of the pharmaceutical science courses to facilitate understanding of cellular mechanisms of action of drugs.

**EMBODY THE PRINCIPLE OF “MISSION FIRST, PEOPLE ALWAYS”:** Students are encouraged to put people first through their experiential courses (IPPE, APPE, Service Learning) that involve direct patient care and required and volunteer activities where they work with community agencies and the general public to educate and provide services. The need to also have students attend to their own well-being emerged more strongly than ever during the pandemic and led to increased monitoring of their behavior.

**PARTNER WITH PLACE:** Students are involved in a variety of community-based experiences including direct patient care at health care sites and pharmacies and community general population events such as wellness fairs. The direct patient care experiences are provided through the curriculum as well as some community events that are part of the service learning experience. Additional contributions to the health of the community are organized and run through pharmacy student organizations or programs/services organized by the School such as the medication therapy management (MTM) telehealth service or the rural screening outreach program (IPHARM).

**PROUDLY TELL THE UM STORY:** Pharmacy students have been providing Covid-19 and influenza vaccinations to Missoula County residents through both volunteer activities and an embedded immunization certification program within the first-year curriculum. These activities have received news coverage from local newspaper and television news programs. They are also featured on the School’s social media accounts and website. The return to more in-person events has also increased the ability of students to proudly share their experiences and aspirations as pharmacy students.

## STUDENT LEARNING GOALS and MEASUREMENT TOOLS

Student Learning Goals	Exam/Quiz	Observe skill / technique	Discuss case / article	Oral presentation	Written work and papers
1. Provide patient-centered care in a variety of practice settings	X	X	X	X	X
2. Communicate effectively with patients, families, caregivers, and health care professionals		X	X	X	X
3. Use critical thinking and problem-solving skills to benefit patients	X	X	X	X	X
4. Work effectively within a multidisciplinary team (i.e., interprofessional)		X			
5. Manage and use resources of the health care system for the benefit of individual patients and the public	X	X	X	X	X
6. Effectively use information resources and technology in one's practice		X		X	X
7. Promote the public's health	X		X	X	X
8. Practice professionally		X			
9. Be a good citizen		X			
10. Develop life-long learning skills			X		X
11. Complete licensure requirements	Practice NAPLEX	X			

Student Learning Goals - continued	Patient care experiences	Portfolio review / EPAs	Peer / Self evaluations	Graduate & Alumni survey	Other measures
1. Provide patient-centered care in a variety of practice settings	X			X	
2. Communicate effectively with patients, families, caregivers, and health care professionals	X	X	X		
3. Use critical thinking and problem-solving skills to benefit patients	X	X			PCOA P3
4. Work effectively within a multidisciplinary team (i.e., interprofessional)	X		X	X	
5. Manage and use resources of the health care system for the benefit of individual patients and the public	X				
6. Effectively use information resources and technology in one's practice	X				
7. Promote the public's health	X		X		Service Learning Project
8. Practice professionally	X	X	X	X	
9. Be a good citizen				X	Co-Curricular; Student Organizations
10. Develop life-long learning skills		X	X		
11. Complete licensure requirements		Candidate Status for Board Exam	X		NAPLEX/MPJE/ Board of Pharmacy

## RESULTS and MODIFICATIONS

Learning Goal results	Modifications made to enhance learning
<p>Impact of the pandemic and adjustments to instructional methods and assessment are monitored frequently. This semester, there has been a return to the more normal in-person learning experiences.</p> <p>Unlike the first year of the pandemic when some session had to be postponed, the faculty have been able to deliver their course content on schedule.</p> <p>The School continues to see a small number of students who are in academic difficulty, and reasons for the poor performance now include some poor learning behaviors. Remediation efforts are made and this has helped some students resume progression in the program.</p>	<p>To achieve a balance of safety and learning, the School used a hybrid approach to its curriculum during the pandemic. Students are now expected to attend all courses on campus.</p> <p>Faculty continue to seek ways to identify students who are struggling academically earlier in the program to allow for remediation or adjusted.</p> <p>Remediation for students who are in academic difficulty is also ongoing and tailored to the needs of each student. A student honor society (Rho Chi) has upperclassmen who offer free tutoring.</p>
<p>Scores from the PCOA were not available during the pandemic. The knowledge exam given to 3<sup>rd</sup> year students became available again in AY 2021-22 and is used each year.</p> <p>The practice licensure exam for graduating students was discontinued due to costs and no apparent impact on the first-time pass rates. The first-time pass rates for the licensure exam (NAPLEX) went from 93% (2019) to 77% (2020) then back up to 87% (2021). There was no practice NAPLEX in 2021. This metric is monitored by the accrediting agency (ACPE).</p>	<p>Returned to plan to identify progression indicators in the P2 and P3 year and discontinued the practice licensure exam (practice NAPLEX) at the end of the P4 year prior to graduation. Retained a low-stakes assessment in the P3 year (PCOA).</p> <p>Continuing to offer a NAPLEX review experience (6-week APPE) that was created during the pandemic years as an elective during the P4 (final) year to further increase preparation and success in first time pass rates.</p>
<p>Monitor and document achievement of learning outcomes across the curriculum using a portfolio with EPA benchmark levels throughout all four years.</p>	<p>To facilitate measuring progress and to guide preparation for achieving the next level, a rubric was created (Spring 2021). Still need to implement with embedded IPPE experiences.</p> <p>Currently looking at feasibility of adding some progression exams or experiences not part of the EPAs to complement the first-year calculations high-stakes exam. An initial plan was created but has yet to be vetted by whole faculty.</p>
<p>Expand the monitoring of co-curricular and interprofessional activities and achievement of skills in ACPE Standards 3 &amp; 4 to include more discussion and planning with the individual students.</p> <p>Reviewed reflection form to reduce student entry errors and misclassifications.</p>	<p>Responsibility for reviewing reflections on co-curricular and interprofessional activities moved to academic advisors.</p> <p>Completion rates for reflections over 90% for P2 students in their first year; too early to determine rate for current first year students.</p> <p>Form completion was reviewed and led to a simplification of the form in the activities description section.</p>
<p>Assessment methods maps had been updated every 5 years by instructional faculty and course coordinators. This year, the Assessment Committee tried a new method for tracking assessment methods based on syllabus content.</p>	<p>Initial findings are less detailed than the previous map but are considered more accurate as they are based on the syllabus and not a faculty member's recall.</p>

## **FUTURE PLANS FOR CONTINUED ASSESSMENT**

- The School will continue its efforts to fully implement the EPA achievement levels in the P1-P3 years in coordination with those already implemented in the final P4 year.
- The School will continue to explore the feasibility of adding high stakes progression exams or experiences in P2 and P3 years to complement the high stakes calculation exam in the P1 year.
- Licensure exam first-time pass rates are monitored closely and the review APPE rotation continues to be offered.
- New mapping for assessment methods in the professional curriculum didactic courses was implemented this academic and will be monitored for performance in summer 2023.

## **APPENDICES**

1. Assessment methods map – new format (updated 2022)
2. Student outcomes by required courses (updated 2021)
3. Co-curricular and interprofessional reflections requirement (updated 2022)
4. EPA levels by class year (updated 2020)

Class Year	Course Number	Credit hours	Sem	Course Type	Quizzes (% of grade)	Exams (% of grade)	Assignments (% of grade)	attendance (% of grade)	During Semester	End of Semester	During Class time	Outside of Class time	Notes about course grade
P1	PHAR 300	4	Fall	Lecture	55%	14%	31%	n/a	APHA immune 50/725; Med term 50/725; 6 calc Quizzes 150/725; 5 Lect quiz 250/725; Resume 50/725; IPPE Immune 50/725; OTC assign 25/725	Final 100/725	abbreviation med term quizzes; Lecture quizzes	APHA online exam; APHA Immunization lectures & IPPE Clinics; 6-7 Calculations quizzes; Resume; OTC assignment	May use +/- grading: A 90% or higher; D < 70%; F < 60%
P1	PHAR 341	4	Fall	Lecture	part of exams	71%	29%	n/a	4 midterms (56 lectures for 560 points) May include quiz points Required textbook but no listed reading assignments	Final (exam 5) not comprehensive and included in 560 pts	Final exam; possible quizzes	Midterm exams; extra credit for completing faculty eval; Reading assignments???	Total 560pts A = 90-100% D = 60-69% F < 60%
P1	PHAR 350 WRITING	1	Fall	Lecture	10%	14%	76%	n/a	DIQs 150 (3x50) Peer review 20 Quiz 30 (3x10) Escape room 20 Assigns 30 (3x10); Assigned readings	Final exam 40/290	Quizzes; escape room?; Final Exam	3 DI questions; DIQ peer review, 3 assignments	Must achieve 70% on all 3 DIQ papers to pass course; A 261/290 points or more; D < 70%; F < 60%
P1	PHAR 371	1	Fall	Integrated Studies	YES	n/a	YES	YES	Attendance & participation; no mention of preparation or pre-session work	n/a	attendance & participation	(Immunization training first week of semester); Friday afternoon IPE event in lieu of class time	CR/NCR
P1	PHAR 381	4	Fall	Lecture	14%	86%	n/a	n/a	4 midterms (100pt each); 19 Quizzes (100pt total) Reading assignments	Exam 5 (100pts) and Final comprehensive (100pt)	final exam	4 midterms; 19 online book quizzes; reading assignments	Total 700 pts No course grade info listed
P2	PHAR 432	3	Fall	Lecture	10%	85%	5%	n/a	3 midterms (each 20% of course grade) Assignments (5%) Clicker (10%) Reading assignments	Final (25% of course grade with 60% new/40% cumulative)	clicker quizzes; final exam	3 midterms; homework assignments; Reading assignments	Percentages not points Plus/minus grading A minus = 90% D minus = 60% F not listed
P2	PHAR 421	3	Fall	Lecture	10%	90%	n/a	n/a	3 midterms (100pt each) quizzes best 5 out of 6 (50pts max) Reading assignments; ungraded assignments	Final comprehensive (150pt)	Final exam; 6 quizzes	3 midterms; readings listed by text pages; mentioned ungraded assignments for further learning.	Total 500pts Curved final grade but no specific levels for A, B, etc; Will provide approximate point ranges for letter grade for each
P2	PHAR 443	4	Fall	Lecture	n/a	100%	n/a	n/a	4 midterms (weight not listed) Textbooks recommended but no reading assignments listed (in Moddle?)	Final (weight not listed)	Final exam; quizzes possible	4 midterms;	Total points A (90-100%) D (60-69.9%) F < 60% "each test will be weighted to the percentage of the final grade"; no schedule of
P2	PHAR 451	3	Fall	Lecture	12%	80%	8%	n/a	3 midterms (110x2; 90x1) Quizzes 60 (3x20) Diet assign 40pt; reading assignments	Final exam 90 (not cumulative)	Final exam; quiz;	3 midterms; assigned readings; diet exercise assignment;	Co-req PHAR 443 Total 500 pts D < 70% F < 65%
P2	PHAR 460	1	Fall	Lab	18%	35%	n/a	47%	Weekly reading assignments Attendance Participation 135 Assignments/quizzes 50 IV cert 100 professionalism	n/a	attendance & participation; quizzes; lab assignments; IV certification	Reading assignments	75% IV cert exam to pass and 26 or more points D < 79%
P2	PHAR 471	1	Fall	Integrated Studies	YES	n/a	YES	YES	1-2h prep time listed Assignments(2) Drug Quizzes weekly	n/a	attendance & participation; drug quizzes	prep time; assignments	C/NC Must earn 80% on drug quizzes to pass course One time cumulative drug quiz if <80%
P3	PHAR 505	3	Fall	Lecture	n/a	40%	60%	n/a	Exams 2x100 In-class assignments 5x15 CMR assignment 100 Presentation 125	No final exam	in-class assignments; presentations	2 midterms; CMR assignment; presentation prep; assigned readings	500 points total Lose points if tardy D < 70% F < 60%
P3	PHAR 550 WRITING	2	Fall	Lecture	7%	12%	80%	n/a	DI consults (100+80) Peer reviews 25 Video assignment 20 Summary assign 25 Inclass assigns 7x5 MUE assigns 2x20 Quizzes 3x10	Final exam 50	In-class assignments; MUE assignments; quizzes; final exam	DI consult papers; peer review; video; summary;	405pts total Must get 70% or more on both DI consult papers to pass course D < 70% 283/405 F < 65% 263/405
P3	PHAR 553	4	Fall	Lecture	18%	77%	5%	n/a	12x10pt Quizzes; 4x100 midterms; 30pt IPPE reflection	Final exam 100	Quizzes	midterms, final, IPPE reflection	650 total points. 90-100% A; 60-69% D; <60% F
P3	PHAR 559	3	Fall	Lecture	15%	60%	20%	5%	Assignments & inclass 15% Online quizzes 10% Midterms (2+final) 60% Participation attendance 5% IPPE Health Status	Final exam (part of 60%)	Final exam;	Assignments; quizzes; 2 midterms; IPPE health status	D < 70% F < 60%



P3	PHAR 560	1	Fall	Lab	15%	39%	31%	15%	Med Hx 20 Reflections 2x10 Phys assesses 2x5 4 Quizzes 60 Clin Assess Prep 10 Rx checks (7x5) IPHARM modules 8x5 ASHP case to Final Clin assess 100 Final progress note 30 IPHARM counseling final 25	Final clinical assessment?	Quizzes	Assignments; preparatory readings;	400 pts D < 70% F < 60%
P3	PHAR 571	1	Fall	Integrated Studies	YES	n/a	YES	YES	Attendance Participation Present cases Summative assessment (?) Quiz	n/a			CR/NCR
P1	PHAR 310	2	Spring	Lecture	20%	n/a	60%	30%	Career paths 30% IPPE (30%) Attendance (30%) One Quiz (10%)	No final exam	Quiz, attendance	career paths; IPPE assignment	D < 70% F < 60%
P1	PHAR 311	1	Spring	Lecture	n/a	n/a	90%	10%	Journals & assignments 50% Participation 10% SLP 40%	No final exam Group presentation	Participation; SLP group meetings	SLP group meetings & project; journals; assignments	All assignments must be turned in to pass course D < 70% F < 60%
P1	PHAR 329	4	Spring	Lecture	9%	91%	n/a	n/a	4 midterms at 100pt each; Friday quizzes 50pts total; no assigned reading	Final at 100pts	quizzes	4 midterms	Total points 550 plus minus grading A>92%; D = 65.1-70; F not posted
P1	PHAR 331	4	Spring	Lecture	e.c.	100%	n/a	n/a	3 midterms (20pts each); bonus 19 quizzes at 1pt each; Readings assigned	Final 40pts comprehensive	final exam and quizzes	3 midterms; assigned readings	Total points 100; traditional grading with plus minus for extreme range ends. A = 90-100%; D= 60-69%; F < 60%
P1	PHAR 342	4	Spring	Lecture	n/a	100%	n/a	n/a	5 midterms (90, 100, 90, 120, 110); no assigned readings	Final (70pt) not comprehensive	Final exam	5 midterms	Total points 580. A=90-100%; D=60-69%; F < 60%
P1	PHAR 372	1	Spring	Integrated Studies	YES	n/a	YES	YES	attendance and participation	n/a	attendance & participation	No mention of pre-reading or pre assignments	CR/NCR grading
P2	PHAR 362	1	Spring	Lab	10%	n/a	60%	30%	Career paths 30% IPPE (30%) Attendance (30%) One Quiz (10%)	n/a	compounded products	No mention of pre-reading or pre/post assignments	No total points or grading information listed
P2	PHAR 412	2	Spring	Lecture	n/a	n/a	100%	n/a	In-class journals 140/415 Book Q 100/415 OpEd paper 100/415 Pearls 25/415 IPE/PT assignment 25/415 IGSL 25/415	No final exam	journal reflections; Pearls presented;	Required Book; OpEd paper; pearls prep; IPE/PT activity; IGSL	D < 70% F < 60%
P2	PHAR 422	3	Spring	Lecture	10%	90%	n/a	n/a	3 midterms at 100pt each; 10 quizzes at 5pt each; readings assigned	Final 150pt - 50pt new lectures and 100pt CDER drugs	final exam and quizzes	3 midterms; assigned readings	Total points = 500. No mention of grading type or levels
P2	PHAR 444	4	Spring	Lecture	n/a	100%	n/a	n/a	seven units (topic areas) split among exams, quizzes and exercises at 10pt per lecture. Five midterms with 100, 90, 90, 60, 120 points; no assigned readings	Final exam (120pts)	? Quizzes and exercises? (info may be in Moodle)	5 midterms	Total points 580 (10 per lecture split prn). Plus minus grading A- to A 90-100%; D = 60-69%; F < 60%
P2	PHAR 452	3	Spring	Lecture	10%	90%	n/a	n/a	Quizzes (50/500) Mid-term exams (300/500)	Final exam (150/500)	Quizzes; final exam	3 midterm exams	D < 348/500 ( 70%) F < 297/500 (59%)
P2	PHAR 463	1	Spring	Lab	n/a	n/a	67%	33%	Lab professionalism pts 125/380 Content 255/380	n/a	lab activities/professionalism & content		D < 79% F < 72%
P2	PHAR 472	1	Spring	Integrated Studies	YES	n/a	YES	YES	In-class quizzes Journal club Attendance /participation	Comprehensive class exam (not sure when given)	attendance & participation; quizzes; journal club presentation	prep journal club review	C/NC course Must pass quiz/exam
P3	PHAR 506	3	Spring	Lecture			100%		Project assignments (500/500)	No final exam			D & F < 349/500pts
P3	PHAR 514 ETHICS	3	Spring	Lecture	n/a	17%	65%	17%	Pre-class readings Case analysis assignments (275/575) Participation (100/575)	Final exam (100/575) Final Presentation (100/575)			Late assignments lose 10pt per day No breakout of letter grade provided
P3	PHAR 554	4	Spring	Lecture	n/a	100%	n/a	n/a	Three midterms (300/400) Four optional cases 15pt each Prior reading for each lecture - one chapter per lecture	Final exam (100/400)	final exam	3 midterm exams; optional cases; CHECK READINGS	Must achieve at least 280/400points to pass the course D < 70%
P3	PHAR 563	1	Spring	Lab	n/a	34%	48%	17%	Weekly assignments due 10pm evening prior to lab session 130/290 pts	Counseling/dispensing final 50/290 IV final 50/290 Must have ≥70% for final assessments IPE 10/290		pre-lab assignments	Weekly assignments: Incorrect information fail assignment/maybe course D < 70% F < 65% course total
P3	PHAR 565	3	Spring	Lecture	68%	15%	3%	15%	In-class quizzes 460/680 CV (reviewed prior to uploading) 20/680	Final exam 100/680	quizzes, final exam	CV;	Attendance 100/680 Late uploads to EValue lose 20pt D < 70% F < 60% course total Curved grading
P3	PHAR 572	1	Spring	Integrated Studies	YES	n/a	YES	YES	Attendance Participation Present cases Summative assessment (?) Quiz	n/a			CR/NCR

**Student Outcomes for Pharmacy Program (Approved Jan 2018)**
**Fall P1**

	#	PHAR 300	PHAR 341	PHAR 350	PHAR 360	PHAR 361
I. Provide patient-centered care						
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences	<b>I.A</b>	I	I, R	R		I
B. Ensure optimal pharmacotherapy for patients	<b>I.B</b>	I			I, R, A	A
II. Communicate effectively with patients, families, caregivers, and health care professionals	<b>II</b>	I		I,R	I, R, A	
III. Use critical thinking and problem solving skills to enhance patient care	<b>III</b>		I, R, A	I,R		R
IV. Work effectively within an interprofessional team	<b>IV</b>	I	I			
V. Manage and use resources of the health care system for the benefit of individual and public health						
A. Promote patient and public safety	<b>V.A</b>	I	I, R		I, R, A	R
B. Perform quality assurance techniques to improve the medication use system and the health care system	<b>V.B</b>	I	I		I, R, A	R
C. Seek to reduce health care disparities	<b>V.C</b>		I			
VI. Efficiently utilize information resources and technology						
A. Identify, retrieve and interpret relevant professional literature	<b>VI.A</b>		R, A	I,R	I, R, A	I
B. Communicate evidence-based information to other health care providers, patients, and the public	<b>VI.B</b>		I	I	I, R, A	
VII. Promote the public's health						
A. Promote health improvement, wellness, and disease prevention	<b>VII.A</b>		I			A
B. Demonstrate awareness of and contribution to solutions of public and population health issues	<b>VII.B</b>		I			
VIII. Practice professionally						
A. Apply legal, ethical, social, and economic principles to practice	<b>VIII.A</b>	I, R			I, R, A	
B. Respond to patients' needs in a culturally-sensitive manner	<b>VIII.B</b>					
C. Apply practice standards to optimize patient care	<b>VIII.C</b>					R
D. Maintain professional competence by becoming a self-aware and self-directed learner	<b>VIII.D</b>	I	I			I
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession	<b>IX</b>	I	I			R
X. Engage in scholarly activity						
A. Use a scholarly approach to become an agent of change to advance pharmacy practice	<b>X.A</b>		I	I		
B. Demonstrate skills and a commitment to life-long learning	<b>X.B</b>		I			R

**Student Outcomes for Pharmacy Program (Approved Jan 2018)**

I. Provide patient-centered care	PHAR 371	PHAR 381	PHAR 310	PHAR 311	PHAR 329
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences	I, R, A	I			I, R, A
B. Ensure optimal pharmacotherapy for patients					I, R
II. Communicate effectively with patients, families, caregivers, and health care professionals	R	I	I	R	R
III. Use critical thinking and problem solving skills to enhance patient care	R, A	I	I	R	I, R
IV. Work effectively within an interprofessional team	I, R			I, R	
V. Manage and use resources of the health care system for the benefit of individual and public health					
A. Promote patient and public safety			I	I, R	
B. Perform quality assurance techniques to improve the medication use system and the health care system					
C. Seek to reduce health care disparities			I	I	
VI. Efficiently utilize information resources and technology					
A. Identify, retrieve and interpret relevant professional literature	I, R, A	I	I		I, R
B. Communicate evidence-based information to other health care providers, patients, and the public	R, A	I	I		I, R
VII. Promote the public's health					
A. Promote health improvement, wellness, and disease prevention			I	I, R	
B. Demonstrate awareness of and contribution to solutions of public and population health issues			I	I, R	
VIII. Practice professionally					
A. Apply legal, ethical, social, and economic principles to practice	I, R, A	I		I	
B. Respond to patients' needs in a culturally-sensitive manner					
C. Apply practice standards to optimize patient care					
D. Maintain professional competence by becoming a self-aware and self-directed learner		I			R
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession			I	I, R	
X. Engage in scholarly activity					
A. Use a scholarly approach to become an agent of change to advance pharmacy practice			I	I	
B. Demonstrate skills and a commitment to life-long learning		I		I	

**Student Outcomes for Pharmacy Program (Approved Jan 2018)**
**Spring P1**

	PHAR 331	PHAR 342	PHAR 362	PHAR 372	PHAR 480	#
I. Provide patient-centered care						
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences	I	I	R, A	I, R, A	R	I.A
B. Ensure optimal pharmacotherapy for patients		I				I.B
II. Communicate effectively with patients, families, caregivers, and health care professionals				R	I	II
III. Use critical thinking and problem solving skills to enhance patient care	I	A	R, A	R, A	R	III
IV. Work effectively within an interprofessional team				I, R	I	IV
V. Manage and use resources of the health care system for the benefit of individual and public health						
A. Promote patient and public safety					I	V.A
B. Perform quality assurance techniques to improve the medication use system and the health care system					I	V.B
C. Seek to reduce health care disparities						V.C
VI. Efficiently utilize information resources and technology						
A. Identify, retrieve and interpret relevant professional literature	R	I	I	I, R, A		VI.A
B. Communicate evidence-based information to other health care providers, patients, and the public	I			R, A	I	VI.B
VII. Promote the public's health						
A. Promote health improvement, wellness, and disease prevention		I,R,A				VII.A
B. Demonstrate awareness of and contribution to solutions of public and population health issues						VII.B
VIII. Practice professionally						
A. Apply legal, ethical, social, and economic principles to practice				I, R, A	I	VIII.A
B. Respond to patients' needs in a culturally-sensitive manner					I	VIII.B
C. Apply practice standards to optimize patient care					I	VIII.C
D. Maintain professional competence by becoming a self-aware and self-directed learner	I	I	R			VIII.D
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession						IX
X. Engage in scholarly activity						
A. Use a scholarly approach to become an agent of change to advance pharmacy practice						X.A
B. Demonstrate skills and a commitment to life-long learning		I				X.B

**Student Outcomes for Pharmacy Program (Approved Jan 2018)**
**Fall P2**

	PHAR 421	PHAR 432	PHAR 443	PHAR 451	PHAR 460	PHAR 471
I. Provide patient-centered care						
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences		R, A	I,R	A	A	A
B. Ensure optimal pharmacotherapy for patients		I, A	I	A	R	A
II. Communicate effectively with patients, families, caregivers, and health care professionals		I	I	A	A	A
III. Use critical thinking and problem solving skills to enhance patient care		I, R, A	I	A	A	A
IV. Work effectively within an interprofessional team			I		R	
V. Manage and use resources of the health care system for the benefit of individual and public health						
A. Promote patient and public safety		I		A	I, R, A	A
B. Perform quality assurance techniques to improve the medication use system and the health care system		I			I, R, A	
C. Seek to reduce health care disparities		I, R, A				
VI. Efficiently utilize information resources and technology						
A. Identify, retrieve and interpret relevant professional literature	I	I	R	R	I	R
B. Communicate evidence-based information to other health care providers, patients, and the public		I		A	R	A
VII. Promote the public's health						
A. Promote health improvement, wellness, and disease prevention		I		A		A
B. Demonstrate awareness of and contribution to solutions of public and population health issues	I	I	I	A		A
VIII. Practice professionally						
A. Apply legal, ethical, social, and economic principles to practice	I			A	R	A
B. Respond to patients' needs in a culturally-sensitive manner					R	
C. Apply practice standards to optimize patient care		I	I	A		R
D. Maintain professional competence by becoming a self-aware and self-directed learner			I	A	R	R
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession		R			A	
X. Engage in scholarly activity						
A. Use a scholarly approach to become an agent of change to advance pharmacy practice	I	I, R, A	I,R		I	R
B. Demonstrate skills and a commitment to life-long learning	I	I, R	I		I	R

**Student Outcomes for Pharmacy Program (Approved Jan 2018)**
**Spring P2**

	PHAR 412	PHAR 422	PHAR 444	PHAR 452	PHAR 463	PHAR 472
I. Provide patient-centered care						
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences	R, A		I	R, A		R, A
B. Ensure optimal pharmacotherapy for patients	R		I	R, A	R, A	R, A
II. Communicate effectively with patients, families, caregivers, and health care professionals	R, A				R, A	R, A
III. Use critical thinking and problem solving skills to enhance patient care			I	A		R, A
IV. Work effectively within an interprofessional team	A		I			I
V. Manage and use resources of the health care system for the benefit of individual and public health						
A. Promote patient and public safety			I	I, R		I
B. Perform quality assurance techniques to improve the medication use system and the health care system				I		
C. Seek to reduce health care disparities	R, A		R			
VI. Efficiently utilize information resources and technology						
A. Identify, retrieve and interpret relevant professional literature	R, A	I	I	I	A	R, A
B. Communicate evidence-based information to other health care providers, patients, and the public	R, A		R		R, A	R, A
VII. Promote the public's health						
A. Promote health improvement, wellness, and disease prevention			I	I		R
B. Demonstrate awareness of and contribution to solutions of public and population health issues		I	I	I		
VIII. Practice professionally						
A. Apply legal, ethical, social, and economic principles to practice	R	I	I	R		I
B. Respond to patients' needs in a culturally-sensitive manner	I, R		I		R	
C. Apply practice standards to optimize patient care				A	R, A	R, A
D. Maintain professional competence by becoming a self-aware and self-directed learner			R	R		R
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession			R		A	
X. Engage in scholarly activity						
A. Use a scholarly approach to become an agent of change to advance pharmacy practice	R	I	I			
B. Demonstrate skills and a commitment to life-long learning		I	I			I, R

**Student Outcomes for Pharmacy Program (Approved Jan 2018)**
**Fall P3**

	PHAR 481	#	PHAR 505	PHAR 550	PHAR 553	PHAR 559
I. Provide patient-centered care						
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences	R	I.A	R		A	R, A
B. Ensure optimal pharmacotherapy for patients		I.B	A		A	A
II. Communicate effectively with patients, families, caregivers, and health care professionals	R	II	A	R, A	A	R
III. Use critical thinking and problem solving skills to enhance patient care	R	III	A	R	A	R, A
IV. Work effectively within an interprofessional team	R	IV	A		A	R
V. Manage and use resources of the health care system for the benefit of individual and public health						
A. Promote patient and public safety	R	V.A	R		R	R
B. Perform quality assurance techniques to improve the medication use system and the health care system	R	V.B	A		R	
C. Seek to reduce health care disparities		V.C	R		R	
VI. Efficiently utilize information resources and technology						
A. Identify, retrieve and interpret relevant professional literature		VI.A	A	A	R	A
B. Communicate evidence-based information to other health care providers, patients, and the public	R	VI.B	A	A	R	R, A
VII. Promote the public's health						
A. Promote health improvement, wellness, and disease prevention		VII.A	R		A	R
B. Demonstrate awareness of and contribution to solutions of public and population health issues		VII.B			A	
VIII. Practice professionally						
A. Apply legal, ethical, social, and economic principles to practice	R	VIII.A	A		R	A
B. Respond to patients' needs in a culturally-sensitive manner		VIII.B	R		R	R
C. Apply practice standards to optimize patient care	R	VIII.C	A		A	A
D. Maintain professional competence by becoming a self-aware and self-directed learner		VIII.D	R	R	R	R
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession		IX		R		
X. Engage in scholarly activity						
A. Use a scholarly approach to become an agent of change to advance pharmacy practice		X.A	R	R	R	R
B. Demonstrate skills and a commitment to life-long learning		X.B	R	R	R	R

**Student Outcomes for Pharmacy Program (Approved Jan 2018)**
**Spir**

	PHAR 560	PHAR 571	PHAR 506	PHAR 514	PHAR 554
I. Provide patient-centered care					
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences	A	A		A	R, A
B. Ensure optimal pharmacotherapy for patients	A	A			R, A
II. Communicate effectively with patients, families, caregivers, and health care professionals	A	A	A	R	
III. Use critical thinking and problem solving skills to enhance patient care	A	A	R	A	R, A
IV. Work effectively within an interprofessional team		R	A	R	
V. Manage and use resources of the health care system for the benefit of individual and public health					
A. Promote patient and public safety		R	R	A	
B. Perform quality assurance techniques to improve the medication use system and the health care system		R	R, A		
C. Seek to reduce health care disparities		R	R	A	
VI. Efficiently utilize information resources and technology					
A. Identify, retrieve and interpret relevant professional literature	A	R	R	A	R, A
B. Communicate evidence-based information to other health care providers, patients, and the public	A	A		R,A	R, A
VII. Promote the public's health					
A. Promote health improvement, wellness, and disease prevention	A	A		A	R, A
B. Demonstrate awareness of and contribution to solutions of public and population health issues		R		A	
VIII. Practice professionally					
A. Apply legal, ethical, social, and economic principles to practice	R	R	R	A	R, A
B. Respond to patients' needs in a culturally-sensitive manner	R	R	R	A	
C. Apply practice standards to optimize patient care	A	A	A	R	R, A
D. Maintain professional competence by becoming a self-aware and self-directed learner		A	A	R	
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession			A	A	
X. Engage in scholarly activity					
A. Use a scholarly approach to become an agent of change to advance pharmacy practice	R	R	A		
B. Demonstrate skills and a commitment to life-long learning	R	R	A	R	



**Student Outcomes for Pharmacy Program (Approved Jan 2018)**
**ig P3**
**P4 Requi**

	PHAR 563	PHAR 565	PHAR 572	#	PHAR 579	PHAR 580
I. Provide patient-centered care						
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences	R, A	R,A	R, A	<b>I.A</b>	R	R
B. Ensure optimal pharmacotherapy for patients	A		R, A	<b>I.B</b>	A	R
II. Communicate effectively with patients, families, caregivers, and health care professionals	R, A		R, A	<b>II</b>	A	A
III. Use critical thinking and problem solving skills to enhance patient care	R, A	R,A	R, A	<b>III</b>	A	A
IV. Work effectively within an interprofessional team	R	I, R, A	R, A	<b>IV</b>	A	R
V. Manage and use resources of the health care system for the benefit of individual and public health						
A. Promote patient and public safety			R, A	<b>V.A</b>	A	A
B. Perform quality assurance techniques to improve the medication use system and the health care system	I, R			<b>V.B</b>	A	A
C. Seek to reduce health care disparities	R	I		<b>V.C</b>	R	R
VI. Efficiently utilize information resources and technology						
A. Identify, retrieve and interpret relevant professional literature	A	R,A	R, A	<b>VI.A</b>	A	A
B . Communicate evidence-based information to other health care providers, patients, and the public	A	R	R, A	<b>VI.B</b>	A	A
VII. Promote the public's health						
A. Promote health improvement, wellness, and disease prevention	R	I, R, A	R, A	<b>VII.A</b>	A	R
B. Demonstrate awareness of and contribution to solutions of public and population health issues		I, R, A		<b>VII.B</b>	R	R
VIII . Practice professionally						
A. Apply legal, ethical, social, and economic principles to practice	R	I,R,A	R, A	<b>VIII.A</b>	A	A
B. Respond to patients' needs in a culturally-sensitive manner	R		R, A	<b>VIII.B</b>	A	R
C. Apply practice standards to optimize patient care	A		R, A	<b>VIII.C</b>	A	A
D. Maintain professional competence by becoming a self-aware and self-directed learner	A	I	R, A	<b>VIII.D</b>	R	R
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession				<b>IX</b>	R	R
X. Engage in scholarly activity						
A. Use a scholarly approach to become an agent of change to advance pharmacy practice	R	R	R, A	<b>X.A</b>	R	R
B. Demonstrate skills and a commitment to life-long learning	R		R, A	<b>X.B</b>	R	R

**Student Outcomes for Pharmacy Program (Approved Jan 2018)**
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I. Provide patient-centered care	PHAR 581	PHAR 582
A. Integrate and apply biomedical, pharmaceutical, social/behavioral/administrative, and clinical sciences	R	A
B. Ensure optimal pharmacotherapy for patients	A	A
II. Communicate effectively with patients, families, caregivers, and health care professionals	A	A
III. Use critical thinking and problem solving skills to enhance patient care	A	A
IV. Work effectively within an interprofessional team	A	A
V. Manage and use resources of the health care system for the benefit of individual and public health		
A. Promote patient and public safety	A	A
B. Perform quality assurance techniques to improve the medication use system and the health care system		
C. Seek to reduce health care disparities	R	A
VI. Efficiently utilize information resources and technology		
A. Identify, retrieve and interpret relevant professional literature	A	A
B. Communicate evidence-based information to other health care providers, patients, and the public	A	A
VII. Promote the public's health		
A. Promote health improvement, wellness, and disease prevention	A	A
B. Demonstrate awareness of and contribution to solutions of public and population health issues	R	R
VIII. Practice professionally		
A. Apply legal, ethical, social, and economic principles to practice	A	A
B. Respond to patients' needs in a culturally-sensitive manner	A	A
C. Apply practice standards to optimize patient care	A	A
D. Maintain professional competence by becoming a self-aware and self-directed learner	R	R
IX. Be a good citizen, demonstrate leadership and contribute to the community, to the state, and to the profession	R	R
X. Engage in scholarly activity		
A. Use a scholarly approach to become an agent of change to advance pharmacy practice	R	R
B. Demonstrate skills and a commitment to life-long learning	R	R