

Status: NEW

PROGRAM REQUEST
Pharmacy Entry-Level PharmD

Last Updated: Kelley, Katherine Ann
07/06/2010

Fiscal Unit/Academic Org	Pharmacy - D1800
Administering College/Academic Group	Pharmacy
Co-administering College/Academic Group	
Semester Conversion Designation	Converted with minimal changes to program goals and/or curricular requirements (e.g., sub-plan/specialization name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program, minimal or no changes in program goals or content)
Current Program/Plan Name	Pharmacy
Proposed Program/Plan Name	Pharmacy Entry-Level PharmD
Program/Plan Code Abbreviation	PHARMD-ELP
Current Degree Title	Doctor of Pharmacy

Credit Hour Explanation

Program credit hour requirements		A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours required for completion of program		193	128.7	129.5	0.8
Required credit hours offered by the unit	Minimum	193	128.7	129.5	0.8
	Maximum				0.8
Required credit hours offered outside of the unit	Minimum				
	Maximum				
Required prerequisite credit hours not included above	Minimum	78	52.0	50	2.0
	Maximum				2.0

Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

- Program Learning Goals**
- provide population-based and patient-specific pharmaceutical care
 - manage and use resources of the health-care system
 - promote health improvement, wellness, and disease prevention

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? No

DIRECT MEASURES (means of assessment that measure performance directly, are authentic and minimize mitigating or intervening factors)

Standardized tests

- Certification or licensure examinations
- Local comprehensive or proficiency examinations

Classroom assignments

- Embedded testing (i.e. specific questions in homework or exams that allow faculty to assess students' attainments of a specific learning goal)
- Other classroom assessment methods (e.g., writing assignments, oral presentations, oral exams)

Evaluation of a body of work produced by the student

- Practicum, internship or research evaluation of student work
- Portfolio evaluation of student work
- Capstone course reports, papers, or presentations

Direct assessment methods specifically applicable to graduate programs

- Other: skills assessments (objective structured clinical exams)

INDIRECT MEASURES (means of assessment that are related to direct measures but are steps removed from those measures)

Surveys and Interviews

- Student survey
- Alumni survey
- Student evaluation of instruction
- Student interviews or focus groups

Additional types of indirect evidence

- Job or post-baccalaureate education placement
- External program review
- Grade review
- Comparison or benchmarking

USE OF DATA (how the program uses or will use the evaluation data to make evidence-based improvements to the program periodically)

- Meet with students directly to discuss their performance
- Analyze and discuss trends with the unit's faculty
- Analyze and report to college/school
- Analyze and report to accrediting organization
- Make improvements in curricular requirements (e.g., add, subtract courses)
- Make improvements in course content
- Make improvements in course delivery and learning activities within courses
- Make improvements in learning facilities, laboratories, and/or equipment
- Periodically confirm that current curriculum and courses are facilitating student attainment of program goals

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

- Rationale courses transition policy.doc: Rational, courses, transition plan
(Program Rationale Statement. Owner: Kelley, Katherine Ann)
- Course map.doc: Curricular map
(Curricular Map(s). Owner: Kelley, Katherine Ann)
- Program approval letter e-signature.pdf: Letter from Dean
(Letter from the College to OAA. Owner: Kelley, Katherine Ann)

Comments

Workflow Information



College of Pharmacy

Office of the Dean
217 Parks Hall
500 West 12th Avenue
Columbus, OH 43210-1291

Phone (614) 292-5711
Fax (614) 292-3113
E-mail Brueggemeier.1@osu.edu

July 6, 2010

Office of Academic Affairs,
203 Bricker Hall,
190 North Oval Mall,
Columbus, OH 43210-1358

Dear Office of Academic Affairs:

On behalf of the College of Pharmacy, I am pleased to recommend for approval the Program Plan for our professional program leading to the Doctor of Pharmacy Degree. This submission contains the details of our professional program conversion only. In December, 2010 we will submit our undergraduate program for review and our graduate programs in March 2011.

The PharmD Program Committee (a curriculum and assessment committee) led the process of conversion. Three members of this committee attended a Curricular Change Summit in Arizona September 2009 held by the American Association of Colleges of Pharmacy. This small team laid the groundwork for the change by drafting a set of Central Tenets for Change which are being used to guide the transition process. Next the PharmD Program Committee used a team-based approach to plan the course changes. Input was gathered widely from course directors, students, division member and finally the faculty as a whole. The proposed curriculum was presented formally to the entire faculty on May 14, 2010 and unanimously approved by the faculty on June 4, 2010. Data entry of the new program was handled by the Office of Assessment and will be approved by me once the system is available.

PharmD students have the opportunity to also complete several combined degree programs (PharmD/MBA; PharmD/MPH; PharmD/PhD). The College will be actively engaged with the graduate programs for these combined degrees once they have completed their conversion plans to reaffirm these combined degree plans.

The PharmD program is undergoing self-study for accreditation currently and we will have a site visit team on campus October 12-14, 2010. The site visit team will also evaluate and provide feedback on our proposed curriculum. Should they require any changes to this semester proposal, we will notify you as soon as possible. Additionally, I would very much appreciate feedback and comments from OAA on our proposal prior to the site visit in October.

Should you have any questions or concerns, please feel free to contact me directly.

Sincerely,

A handwritten signature in cursive script that reads 'Robert W. Brueggemeier'.

Robert W. Brueggemeier, Ph.D.
Dean, College of Pharmacy
Professor, Medicinal Chemistry

Program Rationale
College of Pharmacy
Entry-Level Doctor of Pharmacy Degree Program

The entry-level PharmD program is a four-year graduate professional curriculum leading to the Doctor of Pharmacy degree and preparing graduates to take the licensure exam to become registered pharmacists. While we have continuously enhanced the professional curriculum, this is the first major revision since the program was implemented in 1998. We have characterized our transition to semesters as “converted” because our program goals/outcomes and the general content are similar to the quarter version of the program.

The PharmD program committee adopted a set of central tenets of change for the semester transition. They include the following 3 guiding principles that we will continue to use as we complete the detailed work of moving to a semester calendar.

1. Moving toward a more learner-centered environment
2. Enhancing the connections between our didactic and experiential courses
3. More purposefully linking and developing student skills across the curriculum

Notable changes to the program include the combining of our six quarters of pharmacology and therapeutics course sequences (12 courses total) into four combined or integrated pharmacology and therapeutics courses. A course on immunology offered in the second year was integrated into medicinal chemistry in the first year, and a required two-semester sequence in management was combined into a one-semester course. To satisfy accreditation requirements, clinical experiences were added to the second year. Finally, a two course sequence in physiology formerly taught by the department of Physiology and Cell Biology will be moved to pharmacy. This decision was made in consultation with the Department of Physiology. Changes to the curriculum were also based on analysis of data generated in our curricular assessment processes. The perspectives of students, alumni and faculty as well as direct measures of student learning have been considered in these recommended changes. The integration of course materials among the various topics and disciplines of pharmacy will enable our students to more easily see the connection between our didactic and experiential curricula thus better preparing them for the rigors and challenges of the health care system.

Course Name	Course number
First Professional Year	
Autumn	
Physiology 1	6080
Pharmacy Practice 1	6610
Biopharmacy 1	6010
Medicinal Chemistry 1	6050
Drug Delivery 1	6210
*IPPE 1	6001
Spring	
Physiology 2	6090
Pharmacy Practice 2	6620
Biopharmacy 2	6020
Medicinal Chemistry 2	6060
Drug Delivery 2	6220
Pharmacy Calculations	6240
IPPE 2	6002
Second Professional Year	
Autumn	
Pharmacokinetics 1	7310
Pharmacology and Therapeutics 1	7470
Pharmacy Practice Laboratory 1	7740
Dietary Supplements and Herbal Products	7110
IPPE 3	7003
Spring	
Pharmacokinetics 2	7320
Pharmacology and Therapeutics 2	7480
Pharmacy Practice Laboratory 2	7750
IPPE 4	7004
Third Professional Year	
Autumn	
Pharmacology and Therapeutics 3	7490
Nonprescription Therapeutics Management	7630
IPPE 5	7860
IPPE 5	7005
Spring	
Pharmacology and Therapeutics 4	7500
Pharmacogenomics	7240
Jurisprudence	7900
IPPE 6	7006
4th Professional Year	
May term	
IPPE 7	7007
Summer	
**APPE 1	7991
Autumn	
APPE 2	7992
Spring	
APPE 3	7993

IPPE = Introductory Pharmacy Practice Experiences
 APPE = Advanced Pharmacy Practice Experience

Course related Issues

1. PHR 710 – The content of Pharmacy 710 Immunology will be moved from the P2 year to the P1 year where it will be incorporated into Medicinal Chemistry PHR 607.

Issue

Students who enroll AU 2011 will not take PHR 710 as part of PHR 607 due to the fact that it is the last year of quarters. As they matriculate to semesters for P2 year, PHR 710 will be moved to the P1 year

Proposal

PHR 710 will be taught in AU 2012 as an independent study course (2 credit hours). The lectures will be captured in AU 2011. Students will watch the captured lectures and then take 3 scheduled exams. A live help session will be held by the instructors during the week prior to the exams. Faculty instructors will also hold regular office hours during the term to address student needs/questions. This independent study will only be offered one time to bridge the transition from quarters to semesters

2. APPE (4th year rotations for 2012-2013) Students normally have 11 months (July – May) to complete 9 required 1 month rotations. For the academic year 2012-2013 students will have 10 months (July – April) to complete 9 rotations.

Advising

Town hall meetings will be held with each individual class (cohort) of students and the course plan will be distributed. Since the program is lock step and students in a given cohort all register for the same courses, individual advising sessions are not essential. However, any student wishing individual attention will be scheduled for a one-on-one advising session with the Office of Student Affairs staff. Students will also be advised of the ramifications of stopping out or taking a leave of absence (see below).

Program Progression Issues

1. Stop outs – currently if a student earns an E grade in a course they stop out of the program and rejoin the curriculum the next time the course is offered (the following academic year). They are only required to repeat the course with the E grade.

2. Leaves of absence – currently students may request a LOA at anytime during the academic year and then rejoin the program in the same place that they stopped out, at a later time.

Issue

Students who stop out of a quarter based curriculum cannot rejoin the following year and only repeat the course with the E grade because they will be missing out on content in the other courses offered that semester. For example, a student who earns an E in physiology AU2011 and reenters fall of 2012 would miss 4 weeks of content in the other first semester courses due to the transition from 10-14 weeks.

Students requesting a leave of absence after Autumn or Winter quarters will not be able to rejoin the program in the same place as where they left off.

Proposal

Stop outs due to failed courses or LOA requests will be handled on a case by case basis. These situations may result in a longer time to graduation or the repetition of course work. Every effort will be made by the Program Committee to avoid unnecessary requirements for students in these situations.

Issue

Elective courses: students in the quarter curriculum are required to complete 10 hours of electives, students in the semester curriculum are required to complete 6 hours of electives.

Proposal

All students graduating beginning in SP 2013 will be required to complete the equivalent of 6 semester hours of elective courses. The Office of Student Affairs will help facilitate hour conversions for students where necessary.

College of Pharmacy
Entry-Level PharmD
Curricular Map
Three Top-Level Outcomes to Courses

Course Name	Course number	Outcome*	Level
First Professional Year			
Autumn			
Physiology 1	6080	1,2	beginner
Pharmacy Practice 1	6610	1,2	beginner
Biopharmacy 1	6010	1,2	beginner
Medicinal Chemistry 1	6050	1,2	beginner
Drug Delivery 1	6210	1,2	beginner
IPPE 1	6001	1	beginner
Spring			
Physiology 2	6090	1,2	beginner
Pharmacy Practice 2	6620	1,2,3	beginner
Biopharmacy 2	6020	1,2	beginner
Medicinal Chemistry 2	6060	1,2	beginner
Drug Delivery 2	6220	1,2	beginner
Pharmacy Calculations	6240	1	beginner
IPPE 2	6002	1,2	beginner
Second Professional Year			
Autumn			
Pharmacokinetics 1	7310	1,2	intermediate
Pharmacology and Therapeutics 1	7470	1,2,3	intermediate
Pharmacy Practice Laboratory 1	7740	1,2	intermediate
Dietary Supplements and Herbal Products	7110	1,2	intermediate
IPPE 3	7003	1,2	intermediate
Spring			
Pharmacokinetics 2	7320	1,2	intermediate
Pharmacology and Therapeutics 2	7480	1,2,3	intermediate
Pharmacy Practice Laboratory 2	7750	1,2	intermediate
IPPE 4	7004	1,2	intermediate
Third Professional Year			
Autumn			
Pharmacology and Therapeutics 3	7490	1,2,3	advanced
Nonprescription Therapeutics Management	7630	1,2	advanced
	7860	2	advanced
IPPE 5	7005	1,2,3	advanced
Spring			
Pharmacology and Therapeutics 4	7500	1,2,3	advanced
Pharmacogenomics	7240	1,2	advanced
Jurisprudence	7900	1	advanced
IPPE 6	7006	1,2,3	advanced

4th Professional Year			
May term			
IPPE 7	7007	1,2,3	intermediate
Summer			
APPE 1	7991	1,2,3	advanced
Autumn			
APPE 2	7992	1,2,3	advanced
Spring			
APPE 3	7993	1,2,3	advanced

*Ability based outcomes for PharmD Program

Graduates of the Ohio State University PharmD program will be able to:

1. provide population-based pharmaceutical care
2. manage and use resources of the health care system
3. promote health improvement, wellness and disease prevention

Note: The faculty approved a set of 100 ability based outcome statements that fall into the 3 broad outcome areas listed above. An extensive curricular map was constructed linking all PharmD courses to the 100 outcomes in 3 areas: degree of connection; pedagogy; and assessment. The map provided above is a simplified version of our working curricular map. As we transition to semesters the detailed curricular map will be updated.