

Combined Pharm.D. / Ph.D. Program

College of Pharmacy

Rationale

The combination of advanced professional (Pharm.D.) and research (Ph.D.) education in pharmacy and the pharmaceutical sciences prepares outstanding students for careers in academic pharmacy and pharmaceutical research.

In the combined program, highly motivated students earn the Pharm.D. and Ph.D. degrees in less time than completion of the degrees separately. Some course work is credited toward both degrees, and the calendar year is fully utilized for completion of degree requirements; e.g., summer quarters are devoted to research. Both degrees can be completed after seven years of dedicated effort.

Application

A separate application must be submitted to the Pharm.D. Program, the Ph.D. Program, and the Combined Program; i.e., three applications. Applicants for the Combined Program must first be admitted both by the Ph.D. Program and by the Pharm.D. Program prior to seeking the approval for the combined program. Students who have not yet been admitted separately to both programs should contact the Admissions Office (Room 150 Parks Hall for Pharm.D.; Room 217C Parks Hall for Ph.D.) to obtain the relevant admission applications. Students currently enrolled in one of the programs must apply for admission to the other program; application should be made early to optimize the time saving advantage of the combined program.

Once the applicant has been admitted to both the Pharm.D. and the Ph.D. Programs, application is then made to the Combined Program, which simply entails completion of the top portion of the “**Combined Graduate / Undergraduate or Professional Program**” Form. The form must then be approved and signed by the Graduate Research Committee Chairperson and by the Pharm.D. Admissions Committee Chairperson, and submitted to the Graduate School.

Pharm.D. Application. Students must have completed prerequisites and a general education (liberal education) curriculum. Admission to the Pharm.D. program is competitive based on a faculty committee review of the following:

- Performance in prerequisite course work and overall GPA
- Cumulative and math/science grade-point averages
- Pharmacy College Admission Test (PCAT) scores
- Competency in English for non-native English speakers (refer to current requirements for Pharm.D. Program admission)
- Full disclosure of prior misdemeanor or felony convictions
- Personal statements completed by the applicant
- Extracurricular leadership and work experience

- Letters of recommendation (three required)
- Personal interviews

Applications for admission in the subsequent year (Autumn Quarter) are available in August. The deadline for the submission of applications is January 1. Early submission of application materials will permit the Admissions Committee to make a decision about an interview invitation. Applications must be submitted via the centralized application service. Please visit www.pharmcas.org to apply or obtain more information.

Ph.D. Application. The minimum academic criteria for admission include:

- Credentials documenting prerequisite academic work that gives evidence of ability to pursue a graduate program in one of the pharmaceutical sciences
- An earned 4-year baccalaureate or higher degree from an accredited college or university prior to beginning graduate studies
- A cumulative grade point average equivalent to at least 3.0 on a 4.0 scale in all prior undergraduate college level course work. A 3.0 graduate GPA is required for completed graduate- and graduate-professional-level work or a graduate degree. For those who do not hold a completed bachelor's degree, but have completed the first year of the Pharm.D. Program a 3.5 GPA in all undergraduate work is required along with a minimum 3.0 GPA in Pharm.D. course work.
- GRE (Graduate Record Exam) scores are required of all applicants.
- International Applicants and those who have held the status of U.S. Permanent Resident for less than one year must meet the current division and Graduate School minimum English proficiency requirements.

Admission

Students accepted into the Combined Pharm.D. / Ph.D. Program are admitted by the Graduate School, the Graduate Studies Committee and designated division, and the Pharm.D. Admissions Committee. The University Admissions Office receives application material, determines when the application is complete, calculates the official GPA, and notifies the applicant of the admission decision. For additional information, see Section II-7 of the Graduate School Handbook, accessible via the following link:

<http://www.gradsch.ohio-state.edu/Depo/PDF/Handbook/Handbook.pdf>.

Adviser. At the time of admission to the Combined Program, a Graduate Faculty member is appointed to advise the student, following the guidelines of the individual graduate program. The graduate adviser may be the same as the student's Pharm.D. Program adviser.

Monitoring Progress. The Pharm.D. Program Committee is responsible for monitoring progress of the student toward the Pharm.D. degree (see Student Manual (<http://www.pharmacy.ohio-state.edu/services/students/smanual.html>)). The Graduate Studies Committee and the student's graduate adviser are

responsible for monitoring progress toward the Ph.D. degree. A statement describing the student's goals, objectives, and general plan for completing both degrees must be deposited in the Graduate School by the end of the first quarter of enrollment in the Combined Program.

Course Load. The number of credit hours a Combined Program student attempts each quarter is determined by the student and the adviser(s) and must be consistent with the course loads described in Section II.2.1 of the Graduate School Handbook and by the Pharm.D. Program.

Schedule Approval. Students may access the University Registrar's web site to obtain information about online registration. The student consults with the adviser(s) about course selection.

Withdrawal. Students who are denied further registration in, or who withdraw from, the graduate portion of their combined program may either retain their graduate credit in the Graduate School should they reenroll at a later time, or transfer that graduate credit earned to the Pharm.D. program, subject to the rules of the Pharm.D. Program.

Course Credit. The student's adviser(s) must designate the courses to be completed for graduate credit only, the courses to be completed for Pharm.D. degree credit only, and the courses counted for credit in both programs.

Cumulative Point-Hour Ratio. A student enrolled in the Combined Program has two cumulative point-hour ratios, one including all credit counted toward the Ph.D. degree and one including all credit counted toward the Pharm.D. degree.

Academic Standards. The academic standards stated in Section II.4 of the Graduate School Handbook apply to Combined Program students.

Doctoral Degree Requirements. A student enrolled in the Combined Program must submit the Application to Graduate form to the Graduate School no later than the second Friday of the quarter in which graduation is expected. All doctoral degree requirements apply to students enrolled in the Combined Program (Sections II.5 and II.6 of the Graduate School Handbook).

Curriculum

During the first four years the focus is on the requirements for the Pharm.D. degree. During academic years 1-3 (designated as P1-P3 in the Pharm.D. Program), the required course work for the Pharm.D. degree is completed. This rigorous series of courses will fully occupy the effort of most students. During academic years 1-3 a limited number of courses for the Ph.D. Program may be taken as Pharm.D. Program electives. Summer quarters during years 1-3 may be used to complete courses for the Ph.D. Program and for research. Experiential course work for the Pharm.D. degree is completed during year 4 and the Pharm.D. degree is awarded at the end of Spring Quarter, year 4. Experiential training for the Pharm.D. degree may include up to two months of "non-patient contact" experience and a research rotation is appropriate for combined-program students.

Course work toward the Ph.D. degree is completed typically during years 5 and 6, and the Ph.D. candidacy exam is taken upon completion of course work.

Dissertation research and preparation of the Ph.D. dissertation are then completed followed by the final examination and awarding of the Ph.D. degree. While the Pharm.D. curriculum is completed in a lock-step fashion, the time to complete the Ph.D. Program is necessarily variable due to alternate-year availability of some courses and the variability in the time required to complete the dissertation. The following table outlines the requirements for the two degrees and their coordination over time. Shaded cells represent quarters during which combined program students would generally receive financial support (see Financial Support section below).

Year	Quarter			
	Autumn	Winter	Spring	Summer
1	Pharm D Courses	Pharm D Courses	Pharm D Courses	Research ^a
2	Pharm D Courses	Pharm D Courses	Pharm D Courses	Research ^a
3	Pharm D Courses	Pharm D Courses	Pharm D Courses	Research ^a
4	Pharm D Experiential ^b	Pharm D Experiential ^b	Pharm D Experiential ^b Pharm D Degree	Research
5	PhD Courses	PhD Courses	PhD Courses	Research & PhD Courses
6+ ^d	Candidacy ^c Exam	Research & PhD Courses	Research & PhD Courses	Research & PhD Courses
7+ ^d	Dissertation Research	Dissertation Research	Dissertation Research	Final Exam for PhD degree

^aStudents may hold a GRA appointment which requires enrollment, or may be compensated for time worked (hourly employee) which does not require enrollment.

^bUp to two months may be non-patient contact, and a research rotation is encouraged for two months of the experiential component of the Pharm.D. program.

^cFor example; the exam may be scheduled during any quarter after completion of graduate program course work.

^dThese “years” are flexible in length and depend on rate of progress on dissertation research.

Example Programs

The following tables illustrate courses of study for the combined degree program with emphasis in each of the four areas of graduate study in the College of Pharmacy: Pharmaceutics, Medicinal Chemistry and Pharmacognosy, Pharmaceutical Administration, and Pharmacology. These are examples only; flexibility is permitted in the scheduling of course work.

Pharm.D. / Ph.D. Sample Program - Pharmaceuticals

Year	Quarter			
	Autumn	Winter	Spring	Summer
1	Pharm 601 (3) Pharm 605 (3) Pharm 621 (4) Pharm 661 (3) Pharm 664 (1) Physiol 604 (4) TOTAL 17	Pharm 602 (3) Pharm 606 (3) Pharm 622 (3) Pharm 662 (3) Pharm 664 (1) Physiol 605 (5) 18	Pharm 607 (3) Pharm 623 (3) Pharm 624 (1) Pharm 663 (3) Pharm 664 (1) Mol Gen 650 (5) 16	Research 14
2	Pharm 710 (3) Pharm 731 (4) Pharm 747 (3) Pharm 774 (3) Pharm 777 (5) TOTAL 18	Pharm 711 (3) Pharm 732 (4) Pharm 748 (3) Pharm 775 (3) Pharm 778 (4) 17	Pharm 733 (3) Pharm 749 (3) Pharm 773 (3) Pharm 776 (3) Pharm 779 (4) 16	Research 14
3	Pharm 7xx (3) Pharm 750 (3) Pharm 780 (4) Pharm 784 (1) Pharm 786 (3) Pharm 804 (3) TOTAL 17	Pharm 751 (3) Pharm 781 (4) Pharm 784 (1) Pharm 787 (3) Pharm 802 (4) 15	Pharm 752 (3) Pharm 782 (5) Pharm 784 (1) Pharm 788 (3) Pharm 790 (3) Pharm 807 (3) 18	Research 14
4	Pharm 799.01 (10) Pharm 799.02 (10) TOTAL 20	Pharm 799.03 (5) Pharm 799.04 (5) 10	Pharm 799.05 (5) Pharm 799.06 (5) Pharm 799.07 (5) Pharm.D. degree 15	Dissertation Research Pharm 993 (13) Pharm 850.02 (1) 14
5	<u>PhD Courses</u> Bchm 721.01 (3) Pharm 801 (3) Pharm 850.01 (1) Bchm 613 (4) Pharm 993 (4) TOTAL 15	<u>PhD Courses</u> Pharm 803 (3) Pharm 850.02 (1) Bchm 614 (4) Elective (3) Pharm 993 (4) 15	<u>PhD Courses</u> Bchm 721.03 (3) Pharm 806 (4) Pharm 850.02 (1) Elective (3) Pharm 993 (3) 14	Dissertation <u>Research</u> Pharm 993 (13) Pharm 850.02 (1) 14
6+	Candidacy Exam Dissertation Research Pharm 999 (13) Pharm 850.02 (1) TOTAL 14	Dissertation Research Pharm 999 (13) Pharm 850.01 (1) 14	Dissertation Research Pharm 999 (13) Pharm 850.02 (1) 14	Dissertation Research Pharm 999 (13) Pharm 850.02 (1) 14
7+	Dissertation Research Pharm 999 (13) Pharm 850.02 (1) TOTAL 14	Dissertation Research Pharm 999 (13) Pharm 850.02 (1) 14	Dissertation Research Pharm 999 (13) Pharm 850.01 (1) 14	Final Exam for PhD degree Pharm 999 (13) Pharm 850.01 (1) 14

Sample Pharmaceutics		Dual
Ph.D. Program	Units	Counted
Mol. Gen. 650	3	x
Biochem 613, 614	4,4	
Biochem 721.01, 721.03	3,3	
Pharm 801	3	
Pharm 802	4	
Pharm 803	3	
Pharm 804	3	
Pharm 806	4	
Pharm 807	3	
Pharm 621	4	x
Pharm 622	3	x
Pharm 623	4	x
Pharm 731	4	x
Pharm 732	4	x
Pharm 850.01	2	
Electives	6	
Subtotal.....	63	
Pharm 993	63	
Pharm 999	91	
Subtotal.....	154	
 TOTAL.....	 217	

Pharm.D. / Ph.D. Sample Program – Medicinal Chemistry and Pharmacognosy

Year	Autumn	Winter	Spring	Summer
1	Pharm 601 (3) Pharm 605 (3) Pharm 621 (3) Pharm 661 (3) Pharm 664 (1) Physiol 601 (4)* TOTAL 17	Pharm 602 (3) Pharm 606 (3) Pharm 622 (3) Pharm 662 (3) Pharm 664 (1) Physiol 602* (5) TOTAL 18	Pharm 607 (3) Pharm 623 (3) Pharm 624 (1) Pharm 663 (3) Pharm 664 (1) Electives (5) TOTAL 16	Research TOTAL 14
2	Pharm 710 (3) Pharm 731 (4) Pharm 747 (3) Pharm 774 (3) Pharm 777 (5) TOTAL 18	Pharm 711 (3) Pharm 732 (4) Pharm 748 (3) Pharm 775 (3) Pharm 778 (4) TOTAL 17	Pharm 733 (3) Pharm 749 (3) Pharm 773 (3) Pharm 776 (3) Pharm 779 (5) TOTAL 17	Research TOTAL 14
3	Pharm 750 (3) Pharm 780 (4) Pharm 784 (1) Pharm 786 (3) Elective (4) TOTAL 15	Pharm 751 (3) Pharm 781 (4) Pharm 784 (1) Pharm 787 (3) <i>Pharm 870 (3)</i> Elective (3) TOTAL 17	Pharm 752 (3) Pharm 782 (5) Pharm 784 (1) Pharm 788 (3) Pharm 790 (3) Elective (3) TOTAL 18	Research TOTAL 14
4	Pharm 799.01 (10) Pharm 799.02 (10) TOTAL 20	Pharm 799.03 (5) Pharm 799.04 (5) TOTAL 10	Pharm 799.05 (5) Pharm 799.06 (5) Pharm 977.97 (5) Pharm D. degree TOTAL 15	<i>Pharm 993 (12)</i> TOTAL 12
5	<i>Chem 730 (3)</i> <i>Biochem 661.01(3)</i> <i>(or Chem 613)</i> <i>Pharm 737 (3)</i> <i>Pharm 850.02(1)</i> <i>Pharm 993 (5)</i> TOTAL 15	<i>Chem 832 (3)</i> <i>Chem 632 (3)</i> <i>Biochem 661.02(3)</i> <i>(or Chem 614)</i> <i>Pharm 850.02(1)</i> <i>Pharm 993 (5)</i> TOTAL 15	<i>Chem 833 (3)</i> <i>Pharm 735 (3)</i> <i>Pharm 789 (5)</i> <i>Chem 615 (3)</i> <i>(or chem. 733)</i> <i>Pharm 850.01(1)</i> TOTAL 15	<i>Pharm 993 (12)</i> TOTAL 12
6+	<i>Pharm 999 (11)</i> <i>Pharm 850.02 (1)</i> <i>Pharm 835 (3)</i> TOTAL 15	<i>Pharm 999 (11)</i> <i>Pharm 850.01 (1)</i> <i>Pharm 836 (3)</i> TOTAL 15	<i>Pharm 999 (11)</i> <i>Pharm 850.02 (1)</i> <i>Pharm 851 (3)</i> TOTAL 15	<i>Pharm 999 (15)</i> <i>Cumulative exam</i> TOTAL 15
7+	<i>Pharm 999 (14)</i> <i>Pharm 850 (1)</i> TOTAL 15	<i>Pharm 999 (14)</i> <i>Pharm 850 (1)</i> TOTAL 15	<i>Pharm 999 (14)</i> <i>Pharm 850 (1)</i> TOTAL 15	<i>Pharm 999 (12)</i> TOTAL 12

Pharm.D. course
Graduate course

Pharm.D. / Ph.D. Sample Program – Pharmaceutical Administration

Year	Quarter			
	Autumn	Winter	Spring	Summer
1	Pharm 601 (3) Pharm 605 (3) Pharm 621 (3) Pharm 661 (3) Pharm 664 (1) Physiol 604 (4) TOTAL 17	Pharm 602 (3) Pharm 606 (3) Pharm 622 (3) Pharm 662 (3) Pharm 664 (1) Physiol 605 (5) 18	Pharm 607 (3) Pharm 623 (3) Pharm 624 (1) Pharm 626 (3) Pharm 663 (3) Pharm 664 (1) Elective (3) 18	Bus-Mgt 630 (4) Bus-M&L 650 (4) Pharm 993 (8) RESEARCH 16
2	Pharm 710 (3) Pharm 731 (4) Pharm 747 (3) Pharm 774 (3) Pharm 777 (5) TOTAL 18	Pharm 711 (3) Pharm 732 (4) Pharm 748 (3) Pharm 775 (3) Pharm 778 (4) 17	Pharm 733 (3) Pharm 749 (3) Pharm 773 (3) Pharm 776 (3) Pharm 779 (4) 16	Econ 501 (5) Bus-M&L 750 (4) Pharm 993 (8) RESEARCH 17
3	Pharm 750 (3) Pharm 780 (4) Pharm 784 (1) Pharm 786 (3) AgEd 885 (3) Pharm 850 (1) TOTAL 15	Pharm 751 (3) Pharm 781 (4) Pharm 784 (1) Pharm 787 (3) AgEd 886 (3) Pharm 850 (1) 15	Pharm 752 (3) Pharm 782 (5) Pharm 784 (1) Pharm 788 (3) Pharm 790 (3) AgEd 888 (3) 18	Pharm D Experiential
4	Phar 799.01 (10) Phar 799.02 (10) TOTAL 20	Phar 799.03 (5) Phar 799.04 (5) 10	Phar 799.05 (5) Phar 799.06 (5) Phar 799.07 (5) 15 Pharm.D. degree	Econ 502 (5) Bus-M&L 751 (4) Pharm 993 (8) RESEARCH 17
5	<u>PhD Courses</u> PH-Bio 701 (4) Pharm 816 (4) Pharm 850 (1) Pharm 826 (2) Elective (4) Pharm 993 (3) RESEARCH TOTAL 18	<u>PhD Courses</u> PH-Bio 702 (4) Pharm 821 (4) Pharm 850 (1) Pharm 826 (2) Elective (4) Pharm 993 (3) RESEARCH TOTAL 18	<u>PhD Courses</u> PH-Bio 703 (4) Pharm 824 (4) Pharm 850 (1) Pharm 826 (2) Elective (4) Pharm 993 (3) RESEARCH TOTAL 18	Bus-Fin 721 (4) Acct (4) Pharm 993 (8) RESEARCH 16
6	<u>PhD Courses</u> PH-Epi 710 (4) Pharm 850 (1) Pharm 826 (2) Elective (4) Elective Stat (4) Pharm 993 (3) RESEARCH TOTAL 18	<u>PhD Courses</u> PH-Epi 710 (4) Pharm 850 (1) Pharm 826 (2) Pharm 825 (4) Elective Stat (4) Pharm 993 (3) RESEARCH TOTAL 18	<u>PhD Courses</u> PH-Epi 710 (4) Pharm 850 (1) Pharm 826 (2) Pharm 817 (4) Elective Stat (4) Pharm 993 (3) RESEARCH TOTAL 18	Candidacy Exam <i>PhD Internship</i>
7	<i>Dissertation Research</i> Pharm 999 (15) Pharm 850 (1) TOTAL 16	<i>Dissertation Research</i> Pharm 999 (15) Pharm 850 (1) 16	<i>Dissertation Research</i> Pharm 999 (15) Pharm 850 (1) 16 Final Exam for <i>PhD degree</i>	

Pharm.D. / Ph.D. Sample Program - Pharmacology

Year	Autumn	Winter	Spring	Summer
1	Pharm 601 (3) Pharm 605 (3) Pharm 621 (3) Pharm 661 (3) Pharm 664 (1) Physiol 601 (4)* TOTAL 17	Pharm 602 (3) Pharm 606 (3) Pharm 622 (3) Pharm 662 (3) Pharm 664 (1) Physiol 602* (5) TOTAL 18	Pharm 607 (3) Pharm 623 (3) Pharm 624 (1) Pharm 626 (3) Pharm 663 (3) Pharm 664 (1) <i>Mol Gen 650 (5)</i> TOTAL 19	Research TOTAL 14
2	Pharm 710 (3) Pharm 731 (4) Pharm 747 (3) Pharm 774 (3) Pharm 777 (5) TOTAL 18	Pharm 711 (3) Pharm 732 (4) Pharm 748 (3) Pharm 775 (3) Pharm 778 (4) TOTAL 17	Pharm 733 (3) Pharm 749 (3) Pharm 773 (3) Pharm 776 (3) Pharm 779 (5) TOTAL 16	Research TOTAL 14
3	Pharm 750 (3) Pharm 780 (4) Pharm 784 (1) Pharm 786 (3) Pharm 802 (4) TOTAL 15	Pharm 751 (3) Pharm 781 (4) Pharm 784 (1) Pharm 787 (3) Pharm 804 (3) <i>Pharm 870 (3)</i> TOTAL 17	Pharm 752 (3) Pharm 782 (5) Pharm 784 (1) Pharm 788 (3) Pharm 790 (3) Pharm 807 (3) TOTAL 18	Research TOTAL 14
4	Pharm 799.01 (10) Pharm 799.02 (10) TOTAL 20	Pharm 799.03 (5) Pharm 799.04 (5) TOTAL 10	Pharm 799.05 (5) Pharm 799.06 (5) Pharm 977.97 (5) TOTAL 15	<i>Pharm 999 (12)</i> TOTAL 12
5	<i>Pharm 999 (14)</i> <i>Grad electives</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 15	<i>Pharm 999 (10)</i> <i>Pharm 871 (4)</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 16	<i>Pharm 999 (12)</i> <i>Pharm 872 (3)</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 17	<i>Pharm 999 (12)</i> <i>candidacy exam</i> TOTAL 12
6	<i>Pharm 999 (15)</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 17	<i>Pharm 999 (15)</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 17	<i>Pharm 999 (15)</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 17	<i>Pharm 999 (15)</i> TOTAL 15
7	<i>Pharm 999 (12)</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 17	<i>Pharm 999 (12)</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 17	<i>Pharm 999 (12)</i> <i>Pharm 850 (1)</i> <i>Pharm 873 (1)</i> TOTAL 17	<i>Pharm 999 (12)</i> <i>PhD final</i> <i>defense</i> TOTAL 12

Pharm.D. course
Graduate course
Pharm.D. and Graduate course

Financial Support

Graduate Associates. A student enrolled in Pharm.D. / Ph.D. combined program may hold a Graduate Associate appointment (GTA, GRA) provided all eligibility criteria are met (Section II.8.1.5 of the Graduate School Handbook), and the student is enrolled for at least 12 credit hours during the quarter of appointment. A GA appointment includes a monthly stipend and waiver of tuition and fees. After the Pharm.D. degree is awarded students in the combined program will be appointed to a GA. GA appointment prior to completion of the Pharm.D. degree will generally be possible for the summer quarter. However, a decision to appoint during the academic year will be made on a case-by-case basis, and will consider the availability of funding, and student academic performance and capacity to undertake professional course work along with a 20-hour-per-week commitment to GA duties.