

Graduate Studies in Health Services Research

**College of Pharmacy
The University of Iowa**

Handbook

(August 2019)

Introduction

The material provided in this guide is designed to augment two other publications available to the graduate student: The Manual of Rules and Regulations of the Graduate College and The University of Iowa General Catalog. The student is responsible for reading and understanding the contents of these documents. The statements in this handbook are accurate as of the last update; important changes may have occurred since this was published. In accordance with University policy, any changes in policy reflected in this handbook will not apply retroactively to the disadvantage of any student already in the program.

Mission Statement

The Graduate Program of Health Services Research of the College of Pharmacy, at the University of Iowa has the mission of training independent scientists:

- using an interdisciplinary approach in studying behavior and choice in healthcare, with an economic and social-psychological theoretical basis, and assessing the outcomes of these choices; and
- undertaking research that will provide the new knowledge essential to the understanding and provision of health and pharmaceutical care.

Philosophy and Goals of the Program

The choices made by patients, providers and insurers in the distribution and utilization of drug products and services play a key role in today's health care arena. There is a need for systematic approaches to investigate factors that affect these choices and implications of these choices for the health care system. Graduate study in Health Services Research at The University of Iowa College of Pharmacy is intended to provide a sound foundation in multidisciplinary approaches to develop independent scientists who study these issues.

The faculty has established a program, based on their expertise, through which scientists create and disseminate new knowledge. Each graduate will be well grounded in the creation of new knowledge (research methods, statistics and theory) and the historical and contemporary status of pharmacy and the health care system (pharmaceutical socioeconomics).

Specific goals of graduate study in Health Services Research are to develop independent scientists who possess: 1) awareness of the interaction between the pharmacy knowledge base and health care systems; 2) quantitative and qualitative skills of inquiry; and, 3) sound theoretical background from which scientific approaches and methods can be applied to the study of pharmacy and pharmaceuticals in the health care system.

Admission to the Program

The Program in Health Services Research accepts students from a wide range of educational backgrounds. An undergraduate degree in pharmacy or related health field is helpful, but not required. Admission decisions are based on a composite consideration of prior academic performance, letters of reference, scores on the Graduate Record Exam (GRE), student's statement of interest in graduate education at Iowa, relevant work or research experience and, for international students, TOEFL scores. Students whose statement of interest indicates research areas which do not reflect faculty areas of expertise will not be accepted.

Applications are accepted at any time, but for timely review, applications should be submitted by February 1. Program entry typically is August of each year. Applications received after February 1 will be reviewed, but there typically are a limited number of spots available in the program so if all of the available spots are filled, late qualified applicants may be put on a waiting list.

Students are expected to participate in the program on a full-time basis. Only in rare circumstances will students be permitted to enroll on a part-time basis.

To apply for admission to the HSR Graduate Program offered by the College of Pharmacy, students must apply for admission to the University of Iowa Graduate College and indicate the specific degree program in Pharmacy. If you would like application information or any further information about graduate study in the College of Pharmacy, please contact Lois Baker (lois-baker@uiowa.edu). For questions about specific research interests and opportunities in the HSR Graduate Program, direct your questions to the HSR graduate program director, Dr. Julie Urmie (julie-urmie@uiowa.edu).

Admission Criteria

Admission decisions are based on a combination of factors related to the student's interests and previous academic and professional performance.

Regular Status (minimum admission criteria):

- All University of Iowa Graduate College criteria and minimum standards must be met.
- For students with no previous graduate study, an undergraduate college degree with a grade point average of 3.0 on a 4.0 scale for all course work.
- A Graduate Record Examination (GRE) combined verbal and quantitative score of at least 1050.
- Strong letters of reference.
- Statement of interest in graduate study that fits the program goals and faculty expertise.
- For students with previous graduate study, academic performance will be evaluated on a case by case basis.

Conditional Status:

Students who do not meet the above standards, but appear to have graduate student potential, may be accepted with a conditional status as defined by the Graduate College.

Advising

Upon admission, each student will be assigned an initial advisor who has similar research interests to the student. Frequently, this initial advisor becomes the student's major professor, but sometimes another faculty member will be a better fit. Selection of the major professor is a mutual decision between the student and faculty member and should occur prior to registration for the second academic year.

Selection of a major professor

The selection of a major professor is probably the student's most important act in graduate school. This person will become the student's guide, director and, if fortunate, mentor. The student will study with this faculty member to gain depth and focus. A student should select an individual who has the same or similar interest and with whom the student is able to communicate. A major professor is selected by mutual student - faculty agreement. Co-advisors are allowed by the department if a student would like a course of study that fits into the research interests of two different faculty members.

The role of the major professor is to design a program that is appropriate for the student's interest and degree goals. The major professor must approve all courses and research undertaken for the degree. Although not common, a student may change major professors during their academic program. For situations where significant conflict arises between student and major professor, the Director of the HSR Graduate Program can be consulted. If the major professor is the Director, another tenured HSR faculty member can be consulted.

Plan of study

A plan of study is a collection of university course offerings to be completed to achieve the desired degree. The major professor is essential to the development of a plan of study and must approve all aspects of the plan of study. It is the major professor who has the final responsibility for determining an appropriate plan of study. An initial plan of study shall be developed in conjunction with your major professor prior to the beginning of the second year.

Time to complete the program

The completion of the graduate program is based on meeting the required level of academic knowledge, critical thinking, and/or research skill for the desired degree. It is not determined by calendar months, nor is it defined by number of academic course credits attained. Under normal circumstances, an individual can complete a Master of Science degree in two to three years and a Ph.D. degree in five to six years, depending on background and career goals. The time to complete a program is dependent upon the graduate student's ability to acquire the needed knowledge and skills.

General Information

Registration

Registration procedures are explained in other university publications. New students will register just prior to the beginning of their first semester. This will be explained by the faculty advisor assigned for this registration.

Graduate students may enroll for Ph.D. post-comprehensive registration (as defined in the graduate college student handbook), if they have completed their plan of study, they have taken all examinations except oral defense of thesis, they are not using university facilities for the writing of their dissertation, and they have obtained permission through their major professor from the Associate Dean for Graduate Studies and Research.

Transferring graduate credits from other programs

Transfer credits for a plan of study are determined by the Graduate College and the major professor. Students should be aware that credit for courses taken 10 or more years prior to completion of their degree at the University of Iowa may not qualify as transfer credits.

Transferring from the Master of Science to the Doctoral program

Students wishing to continue their studies after receiving a Master of Science degree must receive the approval of the program faculty, the Associate Dean for Graduate Studies and Research in the College of Pharmacy and the Graduate College. The student who wants to switch from a Master of Science program to the Doctoral program and not complete the M.S. degree requirements must also complete the appropriate approval form. Approval must have been granted by the same parties as mentioned above. Abandoning the M.S. program in progress for a Ph.D. is discouraged.

Required prerequisite courses for the HSR graduate program

To ensure a broad-based understanding of pharmacy in the United States, non-pharmacists and international students must at least audit, Foundations in Health Services Research PHAR 8134 or equivalent in the professional pharmacy degree program as early in the student's program as possible. Audit is required for any teaching assistant assignment associated with these courses. All students will be required to know the contents of these courses for qualifying examinations.

Financial Aid

Assistantships

The HSR program is committed to providing support to students throughout their graduate education. Availability of funds may limit the number of students admitted to the program. Students are generally provided support through research and teaching assistantships. Students with these positions pay the lower in-state tuition rates and also receive an additional tuition stipend from the university each semester. The net support provided by these assistantships is competitive with other Big Ten institutions. In addition, when funds are available the HSR program awards fellowships to incoming students on a competitive basis. Some University-level assistantships and scholarships are available. Refer to the Graduate College for these deadlines. These deadlines for funding should be considered in regards to your application deadlines and anticipated start date.

For first time teaching assistants (TAs) whose first language is not English, the University of Iowa requires an English proficiency exam. This must be done prior to beginning any TA assignment. Deficiencies can be addressed through ESL courses offered through the university.

New employees of the University of Iowa must provide the College of Pharmacy with information on their residence status. U.S. students can use a social security card or birth certificate. A passport is the best document for international students.

Doctor of Philosophy Program

Programs of Study

A program of study may be pursued in this Program based upon economic theory, social-psychological theory, or a combination of the two. Theory provides the foundation for a student's training and future research. Participation in course work, research projects, conference presentations, written manuscripts or other scholarly activity is expected. The major professor is essential to the development of a student's program and must approve all aspects of the program.

Performance Evaluations

Annual Evaluation

Each year in January, every HSR graduate student must work with their major professor to submit a CV and an Individual Development Plan (IDP) to the HSR Graduate Program Director. The IDPs also are submitted to the College of Pharmacy's graduate office. The student's CV, IDP and grades will be reviewed by a majority of Health Services Research (HSR) faculty, under the direction of the Director of the HSR Graduate Program. Based on this review, written feedback regarding student progress will be provided to the student by the student's major professor. This review is intended to help determine whether the student is making satisfactory progress through the program and identify areas of strength and weakness. Identifying areas of weakness helps the major advisor work with the student to make improvements in those areas.

Departmental and Graduate College Examinations

Oral and/or written examinations for the assessment of minimum competency (minimum knowledge level) for the degree sought are called "qualifying exams." These examinations are given to determine how well overall a student is prepared for their desired career and where, if any, the student is weak and needs further work. A discussion of the exams and passing/failing is available in the UI graduate handbook. Each exam is graded by the examining committee as either pass, pass with reservations/qualifications, or fail. A pass means that the exam is successfully completed. Pass with reservations or qualifications means the student has completed the majority of the examination satisfactorily and has a specific weakness that must be addressed and removed. Reasons for qualifications are identified by one or more of the examination committee members and accepted by the committee as a whole. Upon successful removal of the weakness (actions for the removal of the qualification are clearly defined at the time of the exam report) the exam grade is converted to a pass and the student may continue. A fail means that the exam must be retaken in its entirety. An exam can only be taken two times. Two failures on the same exam or failures on two or more exams will mean termination from the program.

Two qualifying examinations are required in this Program. After completing core courses, a qualifying examination is scheduled to assess proficiency on the Core Competencies. The first qualifying exam is taken soon after the student completes the required classes. This exam has an in-class and take home component.

The second qualifying exam assesses proficiency in a student's specialty area. It covers theory as well as methodological techniques specific to the student's specialty. The second qualifying exam is expected to be completed at some point after the student's second year in the program following the successful completion of the Core Competency Qualifying Exam.

After the successful completion of both qualifying exams, the student is eligible to take the Comprehensive Examination that will, upon successful completion, enter the student into the status of candidate for the Doctor of Philosophy degree. The subject matter of the Oral Comprehensive Examination primarily concerns the dissertation proposal of the student. The subject matter remains completely open, however, to allow examination on areas associated with course work or qualifying examinations. For this examination, the student must submit a proposal approved by their major professor. The usual expectation is that the Comprehensive Exam is completed within one year of the specialty qualifying exam. In the HSR Graduate Program the Oral Comprehensive Exam tends to focus on defense of the student's dissertation proposal, though broader questioning is allowed.

After passing the Oral Comprehensive Exam, students must conduct original research, write a dissertation, and provide an oral defense of their dissertation research in a Final Examination. The time and place of the Final Examination is arranged by the student and his/her major professor. In addition, the student must file a copy of the completed dissertation with the graduate college. According to University policy, final examinations for the doctorate are open to the public.

Selection of examination committees

The examination committee for the Core Competency Qualifying Exam is comprised of the HSR faculty. The Specialty Qualifying Exam is prepared and graded by appropriate HSR and University faculty.

The Comprehensive and Final Examinations will follow the graduate school guidelines. The student selects a dissertation examining committee with the approval of the student's major professor. The committee consists of at least five members of the graduate faculty with at least four from the University of Iowa tenure track faculty. Upon completion of the research, the student will write a dissertation and present it to the committee with the Final Examination. For each of these exams, two unsatisfactory votes will make the committee report unsatisfactory.

Academic Criteria for Dismissal

All Graduate College criteria apply. Any student accruing 9 or more credit hours of graduate work with less than a B- grade (C+ or lower) will be excused from the program. Any student failing one qualifying examination twice or both qualifying examinations once will be excused from the program.

Course loads

All doctoral programs, including acceptable transfer credit, must contain a minimum of 72 semester hours of graduate work. The number of credits required for full-time status each semester is listed in the graduate student manual.

There are required and elective courses in the Program. Students who have previous degrees and/or course-work that is repetitious of the required courses should discuss this matter with their advisor. Some courses can be waived, although the content remains relevant for Qualifying Examinations. If a student's experience is redundant with required courses, the student's advisor may request a waiver for the course. Specifically, the advisor and the student will prepare a 1-2 page document outlining how the content of the required course has been covered via past experience. This request will be reviewed by all HSR faculty members and a majority decision regarding the waiver will be made by the HSR faculty. This type of waiver cannot, however, reduce the semester hours required, i.e., 72 semester hours, for the degree. Waived courses may involve transferred credits. Only courses taken during the previous 10-year period will be considered for credit transfer.

REQUIREMENTS FOR THE PH.D. (72 total credits required)

I. CORE Competencies (18 credits)

- A. **Health Service Research.** Students are required to take these courses before taking the Core Competency Qualifying Exam. (9 credits.)

Required:

U.S. health care system class or audit PHAR 8134 (waived for students who have equivalent coursework).

PHAR: 6330 Models of Patient Choice & Behavior

PHAR: 6331 Models of Provider Choice and Behavior

- B. **Research Methods and Statistics.** Students are required to complete these requirements before taking the Core Competency Qualifying Exam. (9 credits)

PHAR: 5350 Fundamentals of Research Methodologies

6 credit hours of Statistics (may be taken in Biostatistics, Economics, Educational Psychology, Mathematics or Sociology)

II. SPECIALTY (At least 24 credits)

With the guidance of their faculty advisor, students must develop a plan of study that encompasses an area of expertise, or a specialty. The specialty area must be comprised of at least 24 credits, and should include course work that covers concepts, principles, research methods, and statistics in an area of interest to the student. The specialty courses must be completed prior to the student taking the Comprehensive Exam.

III. ADDITIONAL REQUIREMENTS

- A. Seminar. (1 credit hour per semester)

PHAR: 5310 Health Services Research Seminar. Students are required to take the Health Services Research Seminar each semester they are on campus, excluding summer.

- B. Research Experience.

Students are expected to participate in specific aspects of ongoing research in the HSR program. Students can enroll in PHAR 6320 in multiple semesters to receive research credit for conducting research with an HSR faculty member. Sometimes, research activities are part of paid graduate research assistantships. Course credit cannot be obtained for research activities performed under paid graduate research assistantships. By their third year in the program, students are expected to present the results from one completed research project at a regional or national meeting.

- C. Principles of Scholarly Integrity (650:270).

This course needs to be completed before graduation with a Ph.D. This requirement is currently setup as a two year course. The program is laid out as follows: a four hour introductory orientation workshop followed by eight bi-monthly workshops over two academic years.

IV. DISSERTATION

The dissertation is an investigation of an original idea using a specific format and style and analytical techniques that are new and/or novel. The ultimate goal is to use a scientific orientation to build a foundation for knowledge. Therefore, one must use scientific principles to test knowledge.

Relative to the form, style and requirements of dissertations, students should consult the Manual of Rules and Regulations of the Graduate College web page available on the University of Iowa Graduate College website.

Requirements for the Master of Science Degree

Students must take 36 credit hours and not more than 9 hours can be thesis or project research credits.

I. REQUIRED COURSES

PHAR: 6330 Models of Patient Choice & Behavior

PHAR: 6331 Models of Provider Choice & Behavior

Statistics

Statistics

PHAR: 5350 Fundamentals of Research Methodologies

II. REQUIRED PREREQUISITE COURSES

Foundations in Health Services Research (PHAR: 8134) must be audited in the first semester they are taught during the student's residence. Exceptions will be made for students with similar course work or experience. All students will be required to know the contents of these courses for comprehensive examinations.

III. THESIS

The thesis follows the University of Iowa Graduate College Regulations. All thesis and non-thesis projects must be written in a format suitable for publication and presentable at a formal seminar. Relative to the form, style and requirements of thesis, students should consult the Thesis and Dissertations web page available on the Graduate College web page.

IV. NON-THESIS MASTER OF SCIENCE

No students will be admitted directly to the non-thesis Master of Science Program. Non-thesis MS degrees will be under special, unspecified circumstances. This alternative requires the completion of an additional 6 credits and the completion of a project. The written and oral presentation of the project must be deemed as acceptable by a majority of the members of the committee. All non-thesis projects must be written in a format suitable for publication and presentable at a formal seminar.