Preface

Welcome to the University of South Carolina College of Pharmacy! The college offers graduate programs leading to the MS and PhD degrees in Pharmaceutical Sciences. One of the options or “tracks” is in Pharmacy Administration within the Department of Clinical Pharmacy and Outcomes Sciences. The faculty sincerely hope that the pursuit of your advanced degree will be productive, rewarding, and enjoyable. The policies and procedures outlined in this handbook are intended to provide a concise compilation of departmental requirements, which complement and reflect the Graduate School regulations outlined in the Graduate Studies Bulletin of the University of South Carolina. All graduate students are encouraged to read and become familiar the degree requirements in the Graduate Studies Bulletin (online http://bulletin.sc.edu/index.php?catoid=76 ) as well as with the policies outlined below. The graduate program in Pharmacy Administration is administered by the Graduate Director, and is aided by Ms. Diane Wise in the Office of the Dean of the College of Pharmacy. Questions concerning admission, policies or procedures should be addressed to the Graduate Director or to Ms. Wise at (803) 777-4151 or wise@cop.sc.edu.

Graduate Program Philosophy

The MS and PhD degree programs are structured to accommodate diverse research interests. The student, in consultation with his/her major advisor and advisory committee, will develop a program of study which reflects his/her research area of interest. Candidates for the MS or PhD degree are expected to conduct original research and to make a contribution to the literature in their area of expertise. Therefore, all MS and PhD candidates must submit a thesis or dissertation as appropriate, as well as manuscripts for publication. In general, each MS and PhD graduate student is expected to publish their findings in peer-reviewed journals during his/her tenure in the degree program.

Graduates of the Pharmacy Administration track are expected to be pharmaceutical scientists. Therefore, students are exposed to interdisciplinary training and education while seeking an advanced degree in pharmaceutical sciences. Candidates with an advanced degree(s) in pharmaceutical sciences will be prepared for a variety of career choices that include teaching and research at academic institutions, research in the pharmaceutical industry, pharmaceutical sales, regulatory governmental agencies, health care consulting, among others.

General University Academic Requirements and Procedures

Admission Regulations

The graduate admissions committee in the Department of Clinical Pharmacy and Outcomes Sciences reviews all applicants to Pharmacy Administration track of the MS and PhD programs. Candidates may apply for admission at any time during the year; review of completed applications begins by March 1st and the application deadline is April 15th for matriculation the following fall semester. Serious consideration will be given to applicants with a minimum overall grade point average of “B”. The GRE verbal score should be a minimum of 294 for the combined verbal and quantitative scores and a minimum score of 4 on the analytical section. Applicants whose native language is not English are also required to submit a satisfactory score on an approved test of English language proficiency. The Department of Clinical Pharmacy and Outcomes Sciences provides a welcoming environment for a wide range of diversity in its student population, including students with disabilities. Typically, qualified applicants will have
diverse backgrounds with a Pharmacy degree or an undergraduate degree in a health-related discipline. Information regarding programs, policies, and admission processes can be obtained at [www.gradschool.sc.edu/](http://www.gradschool.sc.edu/). The college also awards a number of instructional and/or research assistantships to graduate students (see Financial Support section below for further details).

All students must be admitted by the Dean of the Graduate School, following the recommendation of the appropriate school or college. Admission is for the specific purpose stated by the Graduate School and the student must reapply in order to pursue further study or change the degree sought. Non-degree students must also be admitted to the Graduate School. Note that students are allowed to obtain a degree in accordance with the regulations in place at the time they are admitted to degree candidacy. A student may also utilize regulations established after admission to degree candidacy. However, all regulations chosen must be outlined in only one specific graduate bulletin.

**INTERNATIONAL STUDENTS**

In accordance with the graduate bulletin, students whose native language is not English must take a diagnostic test to assess their capabilities in English shortly after arrival on campus. English speaking capability will be assessed in a mandatory workshop held by the USC Graduate School in August or January of each year. Those students found to be deficient in writing, reading or speaking English are provided opportunities for further study.

**NEW STUDENT ORIENTATION**

Upon arrival on campus, each student will meet with the Graduate Program Director in Pharmacy Administration for the purpose of:

- Initial orientation and receipt of Graduate Student Handbook
- Course advisement for registration. The Graduate Director in CPOS will serve as advisor for class registration until the student’s advisory committee is appointed.
- Assignment of teaching assistantship duties, if applicable
- Assignment of graduate office location, and building keys

**Course Regulations**

**COURSE LOADS**

A student with a course load of nine or more credit hours during the fall and spring semesters is classified as full-time. Students with teaching or research assistantships are classified as full-time with 6 or more credit hours during the fall and spring semesters. All students are required to enroll for at least one credit hour during any semester in which thesis or dissertation progress is made or when resources of the University are utilized. With few exceptions, students will register for 3 credit hours during the summer.

**AUDITING A COURSE**

A student must attend at least 75 percent of all classes in a course to receive audit credit. Under no circumstances will a student be allowed to repeat an audited course for credit.
DROPPING A COURSE

Graduate courses may normally be dropped with a non-penalty grade of “W” prior to the end of the sixth week of the regular semester. Courses dropped after six weeks of enrollment will result in a grade of “WF”, which is considered as an “F” for purposes of grade point average and continuation in graduate school. In cases where there is documented justification of the need to drop a course after the six-week period, the graduate director should be informed of circumstances involved. Approval of the request will result in a grade of “W” in accordance with Graduate School procedures. Examples of previous approved requests include a death in the family or a documented serious illness.

GRADING SYSTEM

The grading system utilized by the University of South Carolina is based on a 4-point system. The letter grades A, B, C, D, and F are used to designate excellent, good, fair, poor, and failing. A grade of D+ or lower cannot be applied to degree programs.

I = Incomplete – Is assigned when a student is prevented from completing some portion of work in a course. The instructor must submit a grade change form to the Office of the Registrar explaining the reasons for the incomplete and provision made to complete the course. The grade of ‘I’ is not utilized in computing a student’s grade point average but will be permanently changed to an “F” after a 12-month period.

NR = No record – The grade is not appropriate for the course or has not been submitted. The grade of NR must be appropriately replaced before the last week of the fall or spring semester immediately following the semester that the ‘NR’ was recorded, or an “F” will be assigned.

S or U = Satisfactory or Unsatisfactory, respectively, and may only be utilized in accordance with approved “pass-fail grading.” Courses completed with a grade of “S may count as credits earned.

T or U = Satisfactory or unsatisfactory progress, respectively, toward completion of a thesis or dissertation. These grades are utilized for thesis or dissertation preparation courses designated as PHAR 799 (MS) or PHAR 899 (PhD). Although they count as credits earned, these grades are not utilized in computing the student’s grade point average.

Academic Standards

➢ Graduate courses taken for degree credit must be passed with a “C” or better.
➢ The student must maintain a grade point average of at least 3.0. Graduate degree-seeking students whose cumulative grade point average drops below 3.00 (B) will be placed on academic probation by the graduate school and are allowed one calendar year in which to raise the grade point average to at least 3.00. Students who do not reach a cumulative 3.00 grade point average during the probationary period will not be permitted to enroll for further graduate course work as a degree or non-degree student. Please see the full details of academic standards at the University of South Carolina Graduate school webpage.
➢ A student accumulating 12 credit hours with a grade of “C+” or below in graduate courses taken at the University will not be eligible for a graduate degree. This regulation will remain in effect for 6 years for the MS degree program and 8 years for the PhD degree program.
Grade Changes, Appeals and Petitions

A grade in a course may be changed only by the professor of record in the course, and then only within one year following the initial grade assignment. All appeals and petitions regarding other academic or curriculum matters must utilize the following procedures.

- The nature of the appeal and justification must be submitted in writing to the student’s research advisor and graduate committee chairman.
- The graduate committee chairman will notify the graduate program director and call a meeting of the student’s graduate committee.
- The student’s graduate committee will issue an advisory opinion on the petition or appeal and submit it in writing to the graduate program director, who will render a decision.
- In the event of an unfavorable decision, the student may request that the graduate program director call a meeting of the graduate faculty which will rule on the appeal or petition and forward it in writing to the graduate director. In the case of further denial, additional appeals may be made to the Graduate School in accordance with the Graduate Bulletin.

Dismissal from Graduate Program

Graduate students in either the MS or the PhD programs will be subject to dismissal from the Graduate School and the Graduate Program in the USC College of Pharmacy for the following reason:

- A cumulative G.P.A. below 3.0 beyond the probationary period of 1 year described above;
- Accumulation of 12 hours of ‘C’ or below in courses taken at USC;
- Lack of satisfactory and continued progress towards completion of the degree, as determined by the student’s graduate committee;
- Conviction of sexual harassment in the work place; or
- Deliberate falsification of research results.

Degree Requirements and Curricula

General Requirements

The typical length of time required to complete the MS degree is 2 years and 4 years for the PhD degree in Pharmacy Administration. Further degree-specific requirements are found in the PhD and MS degree requirements below. Course work not part of a completed certificate or graduate degree from USC or another institution may be transferred for credit toward a doctoral degree.

All graduate students (MS and PhD), in consultation with their major advisor and advisory committee, must develop an individualized program of study within 24 months of matriculation. An average grade of “B” or better is required in all courses within a student’s program of study and grades below C are considered as failure. Students must also participate in the departmental seminar program (PHAR 711) every semester the student is enrolled in either degree program.
Doctor of Philosophy Degree

Students who enter the PhD program in Pharmacy Administration with a post-baccalaureate degree (BS or PharmD) must successfully complete at least 61 hours of graduate course work. Students who enter the PhD program in Pharmacy Administration with a Master’s of Science degree in a health-related field must successfully complete at least 34 hours of graduate course work. As part of the general requirements listed above, candidates for the PhD degree are required to complete four departmental seminar courses (PHAR 711A-D). A maximum of 4 hours credit can be earned for PHAR 711. All students are required to submit a dissertation based upon original research, meeting all requirements of The Graduate School prior to award of the degree. Further degree requirements are listed below.

PhD–Pharmaceutical Sciences (Post-baccalaureate entry) (61 Hours)
Required Courses

Pharmacy Core:

- PHAR 711 A-D – Seminar in Pharmacy Administration (4 credit hours)
- PHAR 740 – Socio-economics of Pharmacy Practice (3 credit hours)
- PHAR 741 – Pharmaceutical Outcomes Database Development (3 credit hours)
- PHAR 742 – Research Methods in Pharmacy Administration (3 credit hours)
- PHAR 748 – Principles of Pharmacoeconomics (3 credit hours)
- PHAR 899 – Dissertation Preparation (12 credit hours)

Business Core:

- ECON 720 – Managerial Economics (3 credit hours)
- MKTG 701 - Marketing Management (3 credit hours)
- ACCT 728 - Financial Accounting (3 credit hours)
- ACCT 729 - Managerial Accounting (3 credit hours)

Analytic Core:

- BIOS 700 – Introduction to Biostatistics (BIOS 701 or STAT 515) (3 credit hours)
- BIOS 757 – Intermediate Biostatistics (STAT 516) (3 credit hours)
- BIOS 754 – Discrete Data Analysis (STAT 518) (3 credit hours)
- EPID 701 – Concepts and Methods of Epidemiology (3 credit hours)

Minor/Cognate Courses:
Students must also take at least 9 hours of minor/cognate graduate level courses in one of the following areas: biostatistics, marketing, public policy, economics, or epidemiology. Examples of courses that will satisfy the minor cognate requirement include:

Marketing:
- MKTG 702 - Marketing Research
- MKTG 703 - Marketing Planning
- MKTG 704 - Consumer Behavior
- MKTG 710 – Strategic Marketing
- MKTG 715 – Pricing Strategy and Analysis
- PHAR 744 – Pharmaceutical Marketing
- MKTG 850 - Research Methods and Philosophies in Marketing
Public Policy:
• POLI 711 – Health Politics
• POLI 751 – Policy Analysis I
• POLI 752 – Policy Analysis II: Advanced Policy Analysis
• POLI 757 - Health Politics
• POLI 757 – The Public Policy Process
• HSPM 708 – Methods of Economic Evaluation of Health Projects, Policies and Programs

Economics:
• ECON 510 – Experimental Economics
• ECON 515 – Industrial Organization
• ECON 531 – Health Economics (ECON 850)
• ECON 594 - Introduction to Econometrics
• ECON 711 – Applied Microeconomics
• ECON 736 – Applied Economic Forecasting

Epidemiology:
• EPID 741 - Epidemiologic Methods
• EPID 760 – Epidemiological Methods in Clinical Trial
• EPID 769 – Clinical Effectiveness
• EPID 788 – Practical Methods for Secondary Data Analysis

Biostatistics:
• BIOS 755 – Introduction to Longitudinal Data Analysis
• BIOS 758 - Advanced Biometrics
• BIOS 761 – Survival Analysis
• BIOS 760 – Biostatistical Methods in Clinical Trials
• BIOS 765 – Research Design in the Biomedical Sciences

PhD–Pharmaceutical Sciences (Post-Masters entry) (Minimum of 34 Hours)

Students who enter the PhD program in Pharmacy Administration with a Masters degree in a health-related field must successfully complete at least 34 hours of graduate course work. As part of the general requirements listed above, candidates for the PhD degree are required to complete four departmental seminar courses (PHAR 711A-D). A maximum of 4 hours credit can be earned for PHAR 711. Students must also take at least 9 hours of minor/cognate courses in one of the following areas: biostatistics, marketing, health policy, economics, or epidemiology.

All students are required to submit a dissertation based upon original research, meeting all requirements of The Graduate School prior to award of the degree.

Required Courses: (25 hours)
• PHAR 711 A-D – Seminar in Pharmacy Administration (4 credit hours)
• PHAR 740 – Socio-economics of Pharmacy Practice (3 credit hours)
• PHAR 741 – Pharmaceutical Outcomes Database Development (3 credit hours)
• PHAR 742 – Research Methods in Pharmacy Administration (3 credit hours)
• PHAR 748 – Principles of Pharmacoeconomics (3 credit hours)
• PHAR 899 – Dissertation Preparation (12 credit hours)
Additional coursework may be required as part of the program of study for post-MS entrants and will be determined by the admissions committee after considering the skills, competencies and experiences of the post-MS student and will be selected from among the following:

**Minor/Cognate Courses:**
Students must also take at least 9 hours of minor/cognate courses in one of the following areas: biostatistics, marketing, public policy, economics, or epidemiology. 3 credit hours from the common core required courses may be applied if the course is in the student's chosen area of concentration.

Examples of courses that will satisfy the minor cognate requirement include:

**Marketing:**
- MKTG 702 - Marketing Research
- MKTG 703 - Marketing Planning
- MKTG 704 - Consumer Behavior
- MKTG 710 – Strategic Marketing
- MKTG 715 – Pricing Strategy and Analysis
- PHAR 744 – Pharmaceutical Marketing
- MKTG 850 - Research Methods and Philosophies in Marketing

**Public Policy:**
- POLI 711 – Health Politics
- POLI 751 – Policy Analysis I
- POLI 752 – Policy Analysis II: Advanced Policy Analysis
- POLI 757 - Health Politics
- POLI 757 – The Public Policy Process
- HSPM 708 – Methods of Economic Evaluation of Health Projects, Policies and Programs

**Economics:**
- ECON 510 – Experimental Economics
- ECON 515 – Industrial Organization
- ECON 531 – Health Economics (ECON 850)
- ECON 594 - Introduction to Econometrics
- ECON 711 – Applied Microeconomics
- ECON 736 – Applied Economic Forecasting

**Epidemiology:**
- EPID 741 - Epidemiologic Methods
- EPID 760 – Epidemiological Methods in Clinical Trial
- EPID 769 – Clinical Effectiveness
- EPID 788 – Practical Methods for Secondary Data Analysis

**Biostatistics:**
- BIOS 755 – Introduction to Longitudinal Data Analysis
- BIOS 758 - Advanced Biometrics
- BIOS 761 – Survival Analysis
- BIOS 760 – Biostatistical Methods in Clinical Trials
- BIOS 765 – Research Design in the Biomedical Sciences
PharmD and PhD Dual Degree

All students must successfully complete at least 61 hours of graduate course work. In addition to the general requirements listed above, candidates for the PhD degree in Pharmacy Administration are required to complete four departmental seminar courses (PHAR 711 A-D). All students are required to submit a dissertation based upon original research, meeting all requirements of The Graduate School prior to award of the degree. Further degree requirements are listed below.

Courses for the PharmD and PhD Dual Degree (61 Hours)

In addition to the general requirements listed for the PhD, students pursuing the PharmD and PhD concurrently will take elective courses that are approved for graduate credit and fulfill requirements for the PhD program. Electives in the PharmD curriculum: up to nine credit hours can count toward both degrees, with the following stipulations. The student must have completed at least 90 hours of undergraduate course work and have a minimum GPA of 3.40. A grade of B or higher must be earned for the course to count for graduate credit. At least half of the electives must be numbered 700 or above. Courses numbered 500-699 are acceptable only if they have been approved for graduate credit. Graduate courses taught in units other than pharmacy must be approved by the graduate faculty of pharmacy as appropriate for a PhD degree in pharmaceutical sciences. Registration for each course requires approval of the student's major advisor, the chair of the student's department, the graduate director of the PhD program, and the dean of The Graduate School. Form GS-59A must be processed for each graduate credit course at the time of registration to permit the registrar's office to properly enroll the student for graduate credit.

Master of Science Degree

All students must successfully complete at least 35 hours of graduate course work. In addition to the general requirements listed above, candidates for the MS degree are required to complete two departmental seminar courses (PHAR 711 A-B). A maximum of 2 hours credit can be earned for PHAR 711. All students are required to submit a thesis based upon original research, meeting all requirements of The Graduate School prior to award of the degree. No more than six hours of credit for PHAR 799 will be allowed for thesis research and writing. Further degree requirements are listed below.

MS Degree Requirements (Pharmacy Administration option – 35 credit hours)

- PHAR 711 A-B – Seminar in Pharmacy Administration (2 credit hours)
- PHAR 740 – Socio-economics of Pharmacy Practice (3 credit hours)
- PHAR 742 – Research Methods in Pharmacy Administration (3 credit hours)
- PHAR 748 – Principles of Pharmacoeconomics (3 credit hours)
- ECON 720 – Managerial Economics (3 credit hours)
- MKTG 701 - Marketing Management (3 credit hours)
- ACCT 728 - Financial Accounting (3 credit hours)
- ACCT 729 - Managerial Accounting (3 credit hours)
- BIOS 700 – Introduction to Biostatistics (3 credit hours) (or BIOS 701)
- BIOS 757 – Intermediate Biostatistics (3 credit hours)
- PHAR 799 – Thesis Preparation (6 credit hours)
PhD Degree Progression

Overview of PhD Degree Progression

Following is a brief outline of the steps required during the progression to the PhD and a timeline for each step.

1. Completion of all required course work by the end of the degree program. The core curriculum should be completed by the end of the second year.

2. Selection of a Research Advisor should occur by the end of the second year. The student must notify the graduate director in writing of his/her selection using the ‘Research Advisor Selection Form’.

3. Selection of Graduate Committee. A graduate committee must be selected by the end of the second year. The student must notify the graduate director in writing of the committee’s composition using the G-DCA ‘Doctoral Committee Appointment Request’ form.

4. The PhD Program of Study must be completed by the end of the second year. Students must use Form DPOS ‘Doctoral Degree Program’ printed by the Graduate School. The student must sign the Program of Study, as well as the Chairman of the Student’s committee, and forward the document to the Director of Graduate Studies.

5. The Comprehensive Written/Oral Examination must be taken no later than the end of the 3rd year in the student’s degree program.


Admission to PhD Candidacy

All students must be admitted to Candidacy in order to pursue the PhD degree.

Comprehensive Written/Oral Examination:

After admission to candidacy, and completion of all course work, a Comprehensive Written and Comprehensive Oral examination must be taken no later than the end of the 3rd year in the student’s degree program.

Dissertation

A Written Dissertation is required for completion of the PhD degree. The student is strongly encouraged to check the Graduate School and College of Pharmacy guidelines prior to starting their dissertation. Note that all theses and dissertations are officially submitted online to the graduate school (http://gradschool.sc.edu/students/thesisdiss.asp?page=td). Completed copies of the dissertation should be given to all graduate committee members at least 10 days prior to the defense of the dissertation.
**Dissertation Seminar/Defense**

A Dissertation Seminar and Defense must be completed within 8 years of the start of the PhD program. The dissertation seminar and defense of dissertation must be scheduled through the Graduate Program Director, following consultation with all committee members. The Graduate Director will be responsible for all publicity and/or notification of college faculty for the scheduled dissertation seminar and defense. The dissertation seminar will normally be 40-60 minutes in length with appropriate visual aids and will be open to the public. Following the dissertation seminar, the student will reconvene with his graduate committee for the defense of the dissertation. An affirmative vote of at least 75% of the graduate committee in attendance will constitute a passing performance pending any minor changes in the dissertation required by the committee.

Alternatively, in the event of failure to achieve an affirmative vote of at least 75% of the committee members in attendance, the committee may recommend at its discretion major revisions of the dissertation followed by a second and final defense of dissertation to be conducted within 1 year. Failure in a second defense of the dissertation will normally result in a Master of Science degree in Pharmaceutical Sciences being awarded. In any case, the chairman of the graduate committee will notify the Graduate Program Director in writing, using the appropriate form, of the Committee’s decision.

**MS Degree Progression**

The MS program must be completed within 6 years after enrollment in the degree program. Any course taken that is more than 6 years old cannot be used towards the completion of the degree.

**Admission to MS Candidacy**

All students must be admitted to Candidacy in order to pursue the MS degree.

**MS Program of Study**

A program of study must be submitted to the Graduate Program Director by the end of the 2nd Semester.

**Comprehensive Written Examination**

After admission to candidacy, a Comprehensive Written examination must be taken with 90 days of completion of all course work. The exam should consist of questions involving previous course work and will be administered by the chairman of the student’s committee. The chairman will notify the Graduate Director in writing of the examination ten working days prior to the examination and request questions from all previous instructors. The examination will be numerically graded based on 100 points. The chairman of the student's committee is normally responsible for determining the composition of the exam. Approximately 50% of the exam should come from the student's discipline. The chairman will contact each committee member to determine the pass/fail status and forward this determination to the Graduate Director using the ‘Admission to Candidacy’ form. The student will be notified in writing of successful completion or failure of the examination. In case of failure, one re-examination is allowed within 30-90 days following the initial notification of results.
Thesis

A written thesis is required for completion of the MS degree. The student is strongly encouraged to check the Graduate School and College of Pharmacy guidelines before he/she begins to write. Note that all theses are officially submitted online to the graduate school (http://gradschool.sc.edu/thesisdissertation/dissertation-formatting.asp). The student must follow the requirements of the Graduate School in terms of format, style, type of paper, number of copies required, etc. Completed copies of the thesis should be given to all graduate committee members at least 5 working days prior to the defense of the thesis.

Thesis Seminar/Defense

A Thesis Seminar and Defense must be completed within 6 years of admission to the MS program. The thesis seminar and thesis defense must be scheduled by the Graduate Program Director, following consultation with the chairman of the graduate committee. The Graduate Director will be responsible for all publicity and/or notification of college faculty for the scheduled thesis seminar and defense. The thesis seminar will normally be 40-50 minutes in length with appropriate visual aids and will be presented to all Clinical Pharmacy and Outcomes Sciences students, faculty, and scientific staff. Following the thesis seminar, the student will reconvene with his graduate committee for the defense of the thesis. An affirmative vote of at least 66% of the graduate committee in attendance will constitute a passing performance.

Alternatively, in the event of failure to achieve an affirmative vote of at least 66% of the committee members in attendance, the committee may recommend at its discretion:

- Major revisions of the thesis followed by a second and final defense of thesis to be conducted within 30-90 days
- A second and final defense of thesis to be conducted within 30-90 days

Failure in a second defense of the thesis will normally prevent the awarding of a Master of Science degree in Pharmaceutical Sciences.

Statement of Embargo

After graduation, theses/dissertations are stored and made available in two places: UMI/ProQuest’s database, and USC’s institutional repository, Scholar Commons. With the agreement of their major advisor, students can delay the dissemination of their dissertations with what is commonly referred to as an embargo. An embargo can be required in cases when there are unpublished data obtain in the major advisor’s laboratory with federal or private funding, to be included in the dissertation, as well as in cases concerning intellectual property or patent protections. Typical embargo options include 1-2 years but could be longer depending on the individual situation. During the electronic submission process, students will have to indicate their desired UMI/ProQuest embargo length, which will effectively prevent the full-text of the thesis/dissertation from being available in the UMI/ProQuest database until the embargo period has elapsed. The length of the embargo must be discussed with the major advisor prior to the graduation date. In order to delay release of the thesis/dissertation in USC’s institutional repository, in agreement with their major advisors, students must indicate the requested embargo length on the required signature form and attach a justification memo or letter signed by both the major advisor and program graduate director.
## Graduate Student Research Activity

### Expectations

Every graduate student in Pharmacy Administration is expected to maintain a vigorous research program. This is demonstrated through the submission of abstracts and presentation of posters and talks at national and international meetings, as well as participation in the preparation of manuscripts submitted for publication in peer-reviewed journals.

### Departmental Seminars

#### Philosophy and Objectives

There are two components of the departmental seminar program that contribute to the graduate education program. The first component consists of selected outside speakers. The objective of inviting outside speakers is to provide the students and faculty with an opportunity to interact with international experts on topics of interest in health economics and outcomes research. **Graduate students are required to attend all departmental seminars**

The second component is attendance and participation in PHAR 711, which is offered during the fall and spring semesters. These seminars are presentations prepared by the graduate students and given to the graduate students and faculty. In this course, students gain valuable experience in preparing and delivering research seminars in front of an audience of colleagues. Please see the syllabus and course objectives for PHAR 711 for details. The collective goal is to provide valuable training in communicating science in an oral seminar format.