



College of Pharmacy
UNIVERSITY OF HOUSTON

PhD Concentration in Pharmaceutical Health Outcomes and Policy

*A Graduate Program of Excellence to Develop Leaders in
Pharmaceutical Health Outcomes and Policy*

Graduate Student Policies and Procedures Handbook 2024-25



Pharmaceutical Health Outcomes and Policy (PHOP)

The Pharmaceutical Health Outcomes and Policy (PHOP) concentration in the Pharmaceutical Sciences doctoral degree program at the University of Houston College of Pharmacy offers a learning and research environment that combines the collaborative opportunities of the Texas Medical Center's world-class healthcare and scientific community with the academic resources and award-winning faculty at Houston's only Carnegie Institute-designated Tier One public research university.

Pharmaceutical Health Outcomes and Policy consists of pharmaceutical practice and policy research, a multidisciplinary field that examines cost, access, and quality of pharmaceutical care from clinical, socio-behavioral, economic, organizational and technological perspectives. Traditional and innovative areas of pharmaceutical health outcomes research include pharmacoepidemiology, pharmacoconomics, comparative effectiveness research, patient-centered outcomes research, and translational research.

The PHOP concentration offers structured learning and experiences in health care systems, health care quality, health behavior, biostatistics, multivariate analyses, research methods and design, pharmacoepidemiology, and pharmacoconomics. Elective courses such as secondary data analyses, multilevel modeling, patient-reported outcomes, and risk adjustment provide advanced learning experiences, along with the opportunities to participate in grant proposal writing and teaching and research practicums.

Graduate courses in business administration, psychology, and economics are available from the other departments at the University of Houston. Texas Medical Center academic institutions, such as the University of Texas Health Science Center (UTHealth) and Rice University, also provide additional coursework to provide well-rounded graduate training in pharmaceutical health outcomes and policy.

Within the college's Department of Pharmaceutical Health Outcomes and Policy, our nine faculty members come from a range of backgrounds, including pharmacoepidemiology, practice-based research, public health, biostatistics, and socio-behavioral and administrative pharmacy. Among our faculty are recipients of awards and/ or research grants from such organizations as the National Institutes of Health, the Agency for Healthcare Research and Quality, and the PhRMA Foundation. The college and individual faculty members have collaborative relationships with numerous colleagues and institutions throughout the Texas Medical Center (TMC), offering abundant opportunities for multidisciplinary research. Currently housed in the College of Pharmacy's beautiful new home on the UH main campus, Health & Biomedical Sciences Building 2 since January 2018, PHOP faculty and students enjoy access to over 157,000 square feet of state-of-the-art research and education facilities.

Pharmaceutical Health Outcomes and Policy graduates are in high demand. Welcoming its first students in 2009, the UH College of Pharmacy's PHOP doctoral program maintains contact with over 100 master's and PHD alumni in the pharmaceutical industry, healthcare consulting groups, healthcare organizations, and academia.

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**COURSE REQUIREMENTS FOR PHD CONCENTRATION
in Pharmaceutical Health Outcomes and Policy (PHOP)**

The student must complete a minimum of 75 Credit Hours for the PhD degree. All core and elective requirements must be met with hours completed in residence or approved transfer hours. Transfer hours must be approved. Refer to the Transfer Credit Request Form. A minimum cumulative grade point average of 3.00 (A= 4.00) must be maintained in all graduate level courses required for the PhD degree in order to obtain the advanced degree from the College of Pharmacy.

Required Credit Hours:

The curriculum focuses on all areas of Pharmaceutical Health Outcomes and Policy

	Credit Hours
Health Outcomes Core	9
Research Methods Core	9
Statistical Analysis Core	9
*Electives	18
†Seminar	6
Dissertation Research	23
Dissertation Defense	1

Minimum required for graduation 75

*A minimum of 18 credit hours of elective coursework is required-of which 9 credit hours should be 7000 level or higher. No more than 9 credit hours may be Special Problems.

†Students will be required to enroll in a seminar course each semester. Exceptions generally are not granted for full-time students; however, the requirement may be waived during the final semester due to reduced course load.

**EXAMPLE OF COURSE WORK PLAN FOR FULL-TIME STUDENTS
(Four-Year Program)**

First Year Fall Semester **Credit Hours**

PHCA 7305 Social and Behavioral Determinants and Theory in PHOP	3
PHCA 7308 Biostatistics and Experimental Design	3
PHCA 7340 Data Analytics for PHOP	3
† PHCA 7180 Seminar	1

First Year Spring Semester

PHCA 7320 Introduction to Health Systems and Policy	3
PHCA 7307 Epidemiologic Methods and Research Design	3
PHCA 7301 Regression Analysis and Methods	3
† PHCA 7180 Seminar	1

First Year Summer Semester

Students must **identify their PhD major advisor** before the fall semester of their second year begins and **develop their PhD study plan**. Students may also **apply for an internship** or **register for courses**.

Total First Year **20 credit hours**

<i>Second Year Fall Semester</i>	Credit Hours
PHCA 7306 Pharmaceutical Health Outcomes and Quality	3
PHCA 7316 Pharmacoepidemiology	3
*Elective Course	3
† PHCA 7180 Seminar	1

Second Year Spring Semester

PHCA 7330 Advanced Pharmacoeconomics	3
*Elective Course	3
*Elective Course	3
† PHCA 7180 Seminar	1

Second Year Summer Semester

Students may apply for an **internship** or **register for courses**. Students should be preparing to take their **written comprehensive exams** during the beginning of the Fall or Spring Semester of their 3rd year after core course requirements are met.

Total Second Year	20 credit hours
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Third Year Fall Semester

Credit Hours

PHCA 8198, 8298, 8398 or 8698: Doctoral Dissertation Research or
*Elective Courses
†**PHCA 7180** Seminar

8
1

Third Year Spring Semester

PHCA 8198, 8298, 8398 or 8698: Doctoral Dissertation Research or
* Elective courses
†**PHCA 7180** Seminar

8
1

Third Year Summer Semester

Students may apply for an **internship** or **register for courses**. Additionally, students should be progressing on their **dissertation research**, preparing for the **Area of Emphasis exam** and **dissertation proposal defense** for the Fall.

Total Third Year

18 credit hours

Fourth Year Fall Semester

Credit Hours

PHCA 8198, 8298, 8398 or 8698: Doctoral Dissertation Research or
*Elective courses
†**PHCA 7180** Seminar

8
1

Fourth Year Spring Semester

PHCA 8198, 8298, 8398 or 8698: Doctoral Dissertation Research or
*Elective courses
PHCA 8199 Doctoral Dissertation Defense

8
1

Total Fourth Year

18 credit hours

By the end of the Fourth Year, a full-time student should have completed a minimum of 75 credit hours.

Note: A student may graduate early if the minimum requirements for the program have been completed. Students cannot exceed 99 credit hours of PhD coursework. Although students are required to take the minimum coursework for didactic and dissertation courses, it is at the discretion of the student's faculty mentor and the dissertation committee to approve the final coursework plan, based on the student's academic performance.

COURSE DESCRIPTIONS
DEPARTMENTAL COURSES

PHOP Core Courses

PHCA 7305: Social and Behavioral Determinants and Theory in PHOP

Credit Hours:3. (3-0). Prerequisites: graduate standing or consent of instructor. Introduces the concept of social and behavioral determinants in pharmaceutical health outcomes with an understanding of research topics and theory. Emphasis will be on historical, social and behavioral issues pharmacists have faced and the role of pharmacy managers in health care systems. The course will be a case-based discussion approach with pre-assigned reading material.

PHCA 7306: Pharmaceutical Health Outcomes and Quality

Credit Hours:3. (3-0). Prerequisites: PHCA 7305, graduate standing or consent of instructor. Focuses on practice, policy, and research issues in pharmaceutical health outcomes and quality of pharmaceutical care.

PHCA 7320: Introduction to Health Systems and Policy

Credit Hours:3. (3-0). Prerequisites: PHCA 7305 and PHCA 7306, graduate standing or consent of instructor. The course will be broken up into three modules covering topics related to providers of healthcare, payers of healthcare, and patients receiving healthcare. This graduate-level course will have a longitudinal Health Policy Analysis project to be presented, reviewed, and submitted under the guidance of the course coordinating faculty member.

Research Methods Core Courses

PHCA 7307: Epidemiologic Methods and Research Design

Credit Hours:3. (3-0). Prerequisites: PHCA 7308, graduate standing or consent of instructor. Principles of epidemiologic research methods and applications to address current clinical problems in pharmaceutical health outcomes research. Included are fundamentals of epidemiologic research design, quantitative and qualitative methods, computer applications, design of survey questionnaires, and proficiency in evaluating health policy interventions.

PHCA 7316: Pharmacoepidemiology

Credit Hours:3. (3-0). Prerequisites: graduate standing or consent of instructor. This course focuses on epidemiological principles with application to pharmacy. The course introduces concepts, methods, and nomenclature in pharmacoepidemiology and its applications to current public health problems.

PHCA 7330: Advanced Pharmacoeconomics

Credit Hours:3. (3-0). Prerequisites: PHCA 7316 and PHCA 7307, graduate standing or consent of instructor. The course is designed to prepare upper doctoral students for the branch of eWconomics that uses cost-benefit, cost-effectiveness, cost-minimization, cost-of-illness and cost-utility analyses to compare pharmaceutical products and treatment strategies. Students will learn principles, methods and applications of economic analysis for drug therapy, pharmacy services, and pharmaceutical health policy evaluations, economic model building, and conduct an advanced pharmacoeconomic project of their own suitable for publication.

Statistical Analysis Core Courses

PHCA 7340: Data Analytics for PHOP

Credit Hours:3. (3-0). Prerequisites: graduate standing or consent of instructor. The course is designed to introduce doctoral students to computer data analytic topics and techniques to analyze large healthcare databases using SAS and R. Topics include big data in the US healthcare system, fundamental and advanced SAS and R programming, and issues related to conceptual approach to data analysis including causal inference vs. data mining. The course will prepare students with essential skills for advanced coursework and dissertation research.

PHCA 7308: Biostatistics and Experimental Design

Credit Hours:3. (3-0). Prerequisites: graduate standing or consent of instructor. Applications of experimental design techniques and statistical methods in healthcare and pharmacy, including topics such as hypothesis testing, contingency tables, correlation, regression, and analysis of variance.

PHCA 7301: Regression Analysis and Methods

Credit Hours:3. (3-0) Prerequisites: PHCA 7308, graduate standing or consent of instructor. Applications of multiple regression methods, regression diagnostics, variable selection, model building strategies, and assessment of model fit in pharmacy research with emphasis on linear, logistic, and proportional hazards regression.

Seminar Core Courses

PHCA 7180: Seminar in Pharmaceutical Health Outcomes and Policy

Credit Hours:1. (1-0). Prerequisites: graduate standing or consent of instructor. Review and evaluate recent advances in PHOP literature and the pharmacy profession.

Dissertation Courses

PHCA 8198:8298:8398:8698: Doctoral Dissertation Research

Credit Hours:1, 2, 3, 6 per semester. Prerequisites: consent of instructor. Doctoral Dissertation Research.

PHCA 8199: Doctoral Dissertation Defense

Credit Hours:1 per semester. Prerequisite: consent of instructor. Doctoral Dissertation Defense.

DEPARTMENTAL ELECTIVE COURSES

PHCA 6310: SAS Applications in Statistics

Credit Hours:3. (3-0). Prerequisites: graduate standing or consent of instructor. Practical experiences in conducting statistical analysis using the SAS statistical package to analyze, evaluate, and report data.

PHCA 7312 SAS Programming for Healthcare Data

Credit Hours:3. (3-0). Prerequisites: consent of instructor. Beginning and intermediate SAS statistical applications and programming techniques, including subsetting and merging datasets, arrays, iterative loop, SQL, and macro programming.

PHCA 7313: Pharmacoeconomics

Credit Hours:3. (3-0). Prerequisites: graduate standing or consent of instructor. This course focuses on the economic methods used in evaluating drug therapy decisions. The course will cover the tools needed to assess the costs and outcomes of medications and pharmacy services. Emphasis will be on disease-state management issues with examples from pharmaceutical outcomes research.

PHCA 7310:7610 Research Practicum

Credit Hours:3, 6 per semester. Prerequisites: graduate standing and consent of instructor. A structured research internship experience in the pharmaceutical or healthcare industry.

PHCA 7311: Teaching Practicum

Credit Hours:3. (3-0) Prerequisites: graduate standing and consent of instructor. A structured academic environment experience to prepare and teach lectures in an undergraduate course with the guidance of a professor.

PHCA 8311: Proposal Development

Credit Hours:3. (3-0) Prerequisites: graduate standing and consent of instructor. Applications of grant writing skills to develop and submit a proposal using the NIH format.

PHCA 8311: Advanced Teaching Practicum

Credit Hours:3. (3-0) Prerequisites: graduate standing and consent of instructor. A structured academic environment experience to develop and teach lectures in a graduate course under the guidance of a professor.

PHCA 8301: Behavioral Theories in Pharmacy and Health

Credit Hours:3. (3-0). Prerequisites: PHCA 7305 and PHCA 7306, graduate standing or consent of instructor. Discuss and appraise models and theories in pharmaceutical health outcomes research.

PHCA 8303: Multivariate Analysis

Credit Hours:3. (3-0) Prerequisites: PHCA 7308 and 7301, graduate standing or consent of instructor. Advanced statistical techniques for handling multiple dependent and independent measures in pharmacy administration research such as factor analysis, multiple discriminant analysis, MANOVA, cluster analysis, canonical correlation, and structural equation modeling.

PHCA 8305: Risk Adjustment of Health Care Outcomes

Credit Hours:3. (3-0) Prerequisites: graduate standing or consent of instructor. Interpret and apply patient risk factors, the Donabedian model, administrative and clinical data sources, comparisons across providers, propensity scoring, and estimating the effect of interventions in observational studies.

NON-DEPARTMENTAL ELECTIVE COURSES

There is a wealth of elective courses available to our students within UH as well as institutions in the Texas Medical Center, such as the UT School of Public Health. Elective courses recently taken by our students are listed below. All non-departmental elective course enrollments must be approved by the Faculty mentor and Graduate Academic Advisor. See graduate catalogs from UH and UTSPH for full course listings.

UH (<http://publications.uh.edu/content.php?catoid=30&navoid=11455>)

UTSPH ((<https://web.sph.uth.edu/course/CourseSchedule>)

Enrollment in non-departmental courses is not guaranteed. Please check the current course catalog for availability and allow 7 to 10 business days for enrollment approvals.

Within UH

ECON 6465: Econometrics

Credit Hours:4. (3-1). Prerequisites: graduate standing and consent of instructor. Statistical tools needed to understand and execute empirical economic research. Topics include linear regression, instrumental variables estimation, limited dependent variable models and panel data methods. Emphasis will be on applying econometrics to real-world problems.

ECON 6485: Microeconomic Analysis

Credit Hours:4. (3-1). Prerequisites: graduate standing and consent of instructor. Fundamentals of market and individual choice analysis emphasizing empirical analysis in a business setting. Analysis of domestic and international markets and individual choice, including the theoretical study of the relationships within and between individuals, organizations, and the international economy.

ECON 6340: Health Economics

Credit Hours:3. (3-0). Prerequisites: [ECON 6465](#) and [ECON 6485](#) or consent of instructor. Economic analysis of health care. Topics include the value of health, the demand of health care, health insurance markets, managed care and the Medicare and Medicaid programs.

MARK 7371: Pricing Strategy

Credit Hours:3. (3-0). Prerequisites: graduate standing and consent of instructor. Pricing concepts and analytic tools for maximizing profitability.

MARK 8349: Multivariate Methods in Marketing (Fall only)

Credit Hours:3. (3-0). Prerequisites: graduate standing and consent of instructor. Multivariate data analysis techniques for marketing research.

PHLS 8306: Health Psychology Research, Prevention, & Interventions

Credit Hours:3. (3-0). Formerly/same as EPSY 8306. Prerequisites: none. Introduction to the field of health psychology, with an emphasis on research, prevention, and interventions focused on biological, environmental, and cultural determinants of the development and progression of health disorders.

PSYC 7305: Structural Equations in Psychological Analysis

Credit Hours:3. (3-0). Prerequisites: [PSYC 6300](#) and [PSYC 6302](#) or consent of instructor. Estimation, testing, and assessment of fit using LISREL are examined for path analytic, confirmatory factor, and latent variable models.

PHD 1431: Tools and Methods for Systematic Reviews and Meta-Analysis

Credit Hours:2. This intensive short course is designed to introduce students to best practices, resources, and methods for systematic reviews and meta-analyses, and to guide students through the steps of a systematic review. The course uses examples from a wide variety of completed reviews as well as exercises and readings. The format includes face-to-face (in-person/ITV) and online exercises, readings, and recorded lectures. (A STATA-based lab experience in meta-analysis has been added to the course.) Course resources and materials are available throughout the semester to assist students in applying them to an Integrative Learning experience or dissertation. Students who expect to continue with their own reviews and to receive further support and instruction should enroll in independent study with Dr. Mullen and Ms. Vonville. Students who wish to enroll in the meta-analysis module only should enroll for PHD 1861. Prerequisites: PH 1700 or consent of the instructor and PHM 2610 or equivalent.

PH 1835: Statistical Methodology in Clinical Trials

Credit Hours:3. This course covers the use of current statistical methodology in the design, execution, and analysis of clinical trials. Some of the topics include basic study design, randomization, sample size issues, data analysis issues, and interim monitoring. Prerequisites: PH 1700 and calculus, or the consent of instructor.

PH 2860: Advanced Design Analysis Methods in Epidemiology

Credit Hours:3. This course primarily covers topics related to study design and appropriate data analysis using advanced techniques. At the core, the faculty will discuss basic and generalized regression models for binary (logistic), continuous (linear), and count (Poisson) outcomes; multivariate data reduction techniques, such as factors analysis and Principal Component Analysis; longitudinal models; analysis of clustered data; and select data mining methods. Whenever possible, the faculty will illustrate how to carry out data analyses in SAS or STATA or other suitable statistical packages.

PHD 3810 Health Policy in the United States

Credit Hours:3. This course teaches students to appraise health policy in the United States and evaluate its strengths and weaknesses. Principal policy-making institutions, processes, and ideas that shape health policy at the federal level will be assessed and criticized.

PH 3915: Methods for the Economic Evaluation of Health Programs

Credit Hours:3. This course covers the concepts and methods for the economic analysis of healthcare decision alternatives. Topics will include cost-benefit, cost-effectiveness and cost-utility analysis, and other methods of decision analysis. It emphasizes the application of these methods to the evaluation of alternative health programs.

PHD 3926: Health Survey Research Design

Credit Hours:3. This course presents methods for designing and conducting health surveys. Emphasis will be placed on problem conceptualization, measurements, and questionnaire design in the context of a total survey design framework. Examples of face-to-face, telephone, mail, and Internet surveys will be presented. Prerequisites: PHM 1690 and PHM 2610 or equivalents.

POLICIES AND PROCEDURES

Overview of Program Timeline

Successful completion of the PhD requires completion of didactic education coursework, comprehensive examinations, and dissertation research. A suggested timeline with milestones for consistent progression of a full-time student on a 5-year program is provided below.

PLEASE NOTE: Not all students will progress the same; individual students may vary and complete some milestones sooner, whereas others may take longer. Faculty mentors, the graduate academic advisor, Assistant Dean for Graduate Programs, and Graduate Education Committee will monitor all progress.

Year 1	Core Coursework and Faculty Mentor Selection	
	Fall	Core Coursework Begin Initial Rotations
	Spring	Core Coursework Complete Initial Rotations Intensive Rotation Sign-up (May 1)
	Summer	Complete Intensive Rotation Faculty Mentor Selection Final (August 1)
		<u>Faculty Mentor Selection Form due</u> <u>Degree Plan due</u>
Year 2	Core Coursework, Research with Faculty Mentor	
	Fall	Core Coursework
	Spring	Core Coursework
	Summer	Internship (Optional)
Year 3	Comprehensive Exam, Research with Faculty Mentor, Elective coursework	
	Fall	Written Comprehensive Exam*
	Spring	Elective coursework
	Summer	Internship (Optional)
Year 4	Dissertation Committee, Area of Emphasis Exam, Begin Dissertation Research	
	Fall	Dissertation Committee formed
	Spring	Area of Emphasis Exam Dissertation Proposal Defense
	Summer	Dissertation research Internship (Optional)
Year 5	Dissertation Work and Graduation	
	Fall	Dissertation research
	Spring	Dissertation Defense
	Summer	Dissertation Upload Final Degree Plan Graduation

* May be taken in Spring of Year 3, depending on Core Coursework completion

Academic Probation and Dismissal Rules

1. Every graduate student must maintain a 'B' average or 3.00 GPA throughout the PhD program curriculum. Failure to do so will automatically put the student on academic probation for the following semester. Once on probation, the student has one semester (Fall or Spring) to improve their grades, after which, if their GPA is still below 3.00, the student may have to withdraw from the program. Students who are on probation and who show improvement in course grades may petition for an extension to the Department Graduate Education Committee (GEC).
2. Students will be automatically put on academic probation upon receipt of their second 'C' grade. Students who receive a grade of 'C' in 8 or more credit hours of coursework will be dismissed from the program.
3. A student receiving a 'D' in any core course with 3 or more credit hours will be dismissed from the program. Students may appeal to the GEC, which will determine if other aspects of the student's career (e.g., high GPA, publications, research progress) warrant the student's continuation under academic probation. If the student is permitted to continue, they must repeat the course and achieve at least a 'B' grade. Failure to get a 'B' on the second try will result in immediate dismissal from the program.
4. A student receiving an 'F' in a course with 3 or more credit hours will be dismissed from the program with no appeal.
5. A student receiving one Unsatisfactory (U) grade in any course (including any credit for research, lab rotations, seminars, special problems, and doctoral research) will be put on academic probation. A student receiving two Unsatisfactory (U) grades in any course (including any credit for research, lab rotations, seminars, special problems, and doctoral research) will be dismissed from the program. A student with an 'I' as the most recent grade in a graduate level course will not be eligible for graduation.

Initial Interviews and Intensive Research Rotations

PhD students will need to identify a faculty member to be their primary mentor throughout their program and dissertation research. To identify a mentor, PhD students will meet with faculty for initial interviews to learn the research interests of all faculty members in the department. These should start in the Fall and finish early in the Spring semester of the first year of study. PhD students will submit the Initial Research Rotation Form to the Graduate Education Committee by the last day before Spring Break (approximately March 15). A list of faculty who are able to take new students as advisees will be provided by April 1. Students will choose at least 2 faculty for rotation and complete an Intensive Research Rotation sign-up sheet provided by the Graduate Advisor (Melissa) by April 15. Intensive Research rotations last approximately one month and may be conducted concurrently with more than one faculty member. Students will be notified of their rotation assignments by May 1. Students must complete their rotations by July 15. Final decisions with signed Faculty Mentor Selection Form must be provided to the Graduate Education Committee by August 1 before the start of the second year.

PhD Dissertation Committee Chair (Faculty Mentor)

After selection of the permanent mentor, the student will be primarily monitored by their faculty mentor. All academic and research decisions should be discussed and approved by the faculty mentor prior to any action being taken. Faculty mentor signatures are required on all official university documentation and requests. PhD students should meet regularly with their mentor over the course of their program.

In the event the student is unable to work satisfactorily with the chosen faculty mentor, the student may attempt to find another mentor as long as the student is not on academic probation. The Graduate Education Committee will assist the student in either resolving the problem or identifying another mentor. However, documentation of

repeated notifications to the student to correct deficiencies in performance without evidence of appropriate action by the student to correct these deficiencies may result in the student's dismissal from the graduate program.

Developing the PhD Plan

Each student must submit an official degree plan for approval. The degree plan formally declares your degree objective, and the specific courses that you will be required to complete as part of your degree program. You will develop your proposed degree plan in consultation with your mentor and the GAA. Students and mentors are recommended to use the PhD Degree Plan form (see appendix). Students should use the PhD degree plan form to develop an initial degree plan which must be approved by your advisor and the Graduate Education Committee one year after enrolling in the PhD program. A copy of the initial degree plan will be provided to the student and the faculty mentor. All changes to the degree plan should be signed by the student and the faculty mentor. A completed final degree plan, approved by your mentor and committee members, must be submitted during the semester the student intends to graduate. The PhD degree plan form should be used and the area indicating final plan should be checked. This document should be submitted no less than 60 days prior to applying for graduation (see University of Houston Academic Calendar).

Dissertation Research

Research activities in the doctoral program may focus on a number of major categories in issues related to Health Outcomes and Policy, for example: Pharmacoeconomics, Pharmacoepidemiology, Health Services Research, Management and Marketing, Patient Behavior, Pharmaceutical Care, Health Systems Operations, and Information Systems in Health Care. It is expected that the students will utilize the time before completing their comprehensive exams to conduct sufficient original literature review to write a NIH-style dissertation proposal (detailed below). The quantity of research expected for the dissertation should be sufficient for at least two publications and should be sufficiently complete as judged by the PhD mentor and the dissertation committee to produce an acceptable dissertation document. The dissertation is intended to demonstrate that the student can conceive, conduct, analyze, interpret and present the results of a scientific study to the academic community. The student will be expected to master research techniques, learn to critically evaluate the scientific literature, have a firm grasp of what is involved in a sound, independent research project, assemble intelligently the research results and present and defend it in a manner suitable for presentation to the scientific community.

Monitoring of Graduate Student Progress

The student's faculty mentor, graduate academic advisor, PHOP Graduate Education Committee and the Assistant Dean for Graduate Programs all monitor the academic and research progress of the student, as well as to ensure compliance with departmental policy and procedures. Where areas of concern or problems are identified, the student will be informed, and a plan developed to overcome deficiencies or problems. The student will be requested to check in with the GAA once each long semester for progression monitoring. The GAA will be the first point of contact regarding all administrative processes.

Authorship and Publication

All research conducted by a student while at the University of Houston must be in compliance with all regulations for the conduct of scientific research that are applicable for all faculty and students at the University of Houston. These include: research ethics, research compliance, and Committee for Protection of Human Subjects (CPHS) approval. See <https://www.uh.edu/research/compliance/irb/> for more information.

Students are strongly encouraged and expected to present their research at local, regional, national and international scientific meetings, and to publish their original research in peer-reviewed scientific and medical

journals. It is highly recommended that students discuss authorship requirements with their faculty advisor or course coordinator prior to initiating any research work that could be published.

Dissertation Research

All dissertation research is expected to be published. Faculty will work with the students to encourage and assist them in submitting high quality research to peer-reviewed journals for publication. The Chair of the Dissertation Committee will discuss authorship and publication plans with the student and committee members at the first full meeting of the dissertation committee. The student is required to submit two manuscripts based on their dissertation research to peer-reviewed journals prior to the dissertation defense. The student will not be allowed to defend the dissertation until this requirement is met.

Dissertation Committee

All students are required to form a doctoral dissertation committee, composed of at least five members. The Chair of the Committee (faculty mentor) must hold a doctoral degree and be a full-time tenured or tenure track faculty member in the Department of Pharmaceutical Health Outcomes and Policy. Two additional committee members must hold a PhD and be full-time tenured or tenure-track faculty members in the Department of Pharmaceutical Health Outcomes and Policy. Two other committee members should be selected, one of which must be outside the department. The advisor and student must complete the Dissertation Committee Form (see appendix). Once formed, the Dissertation Committee must meet at least once per long semester. The occurrence of these meetings is monitored by the GAA and the Chair of the Committee.

The required representation of the committee is provided below:

- a) A chairperson – The chair is the faculty Mentor and should be a full-time tenured (tenure track) faculty member in the Department of Pharmaceutical Health Outcomes and Policy.
- b) A full-time tenured (tenure track) faculty member in the Department of Pharmaceutical Health Outcomes and Policy who is requested by the student and approved by the committee chair.
- c) A full-time tenured (tenure track) faculty member in the Department of Pharmaceutical Health Outcomes and Policy who is requested by the student and approved by the committee chair.
- d) A faculty member from outside the Department of PHOP who holds an appropriate doctoral degree to assist the student with the area of research.
- e) An additional member from within or outside the university that holds the appropriate doctoral degree to assist the student with the area of research.

Comprehensive Exams

Students must take and pass written comprehensive exams before taking the oral comprehensive exam. The student should discuss with the faculty mentor when it is best to take the exams.

Written Comprehensive Exam

All students will be required to pass written comprehensive exams before starting their dissertation research. The objectives of these exams are to ensure that students are proficient in the core and specific areas of their research. The written exam consists of two tests: Core and Area of Emphasis. The Core exam will include PHOP, Statistics, and Research Methods tests; Each test is a 4-hour exam and with the questions written by the course-offering faculty. Students will be required to pass each Core test with a minimum of 80% competency to be considered to have passed the core exam. Students will be eligible to take the Core Exam after completion of all courses in the core curriculum. The Core Exam will be offered during the first few weeks of the fall and spring semesters, provided there are at least two students meeting the qualifications and seeking to take the exam. If only one student is seeking to take the exam for a given semester, the student must petition in writing to the Graduate Education

Committee of PHOP for approval to take the exam. It is the student's responsibility to inform the Chair of the Graduate Education Committee and the GAA of their intent to take the Core Exam, at least one month prior to the upcoming exam.

The Area of Emphasis test is a 4-hour exam and the student's dissertation committee will provide questions for the exam. The faculty mentor is responsible for the development and administration of the Area of Emphasis test, which will be an open book exam. Students will be required to pass the test with a minimum of 80% competency to be considered to have passed the Area of Emphasis Exam. Students will be eligible to take the Area of Emphasis Exam after completion of all minimum elective requirements (18cr, with 9cr at 7000 level) AND after having formed the complete dissertation committee in the semester prior to taking the exam.

Students that do not pass a specific test must retake the exam after sufficient remediation supervised by the faculty mentor. If the student is unsuccessful in mastering the material after the second attempt, the student will be recommended to withdraw from the Pharmaceutical Sciences program. The student along with the faculty mentor may petition the Graduate Education Committee to allow the student to take it the third time only after developing a new coursework plan. Students may have to take certain courses before attempting the exam a third time. This third attempt will be the final opportunity for the student to qualify to conduct the dissertation. Failure to pass the exam during this third and final attempt will result in automatic expulsion from the program.

Oral Comprehensive Exam and Dissertation Proposal Defense

All students are required to write a proposal of their dissertation project and successfully defend it before their Dissertation Committee before dissertation research can begin. The written proposal is required to follow the NIH R01 12-page format.

All students will be required to take an oral comprehensive exam. This exam is expected to be completed within one year of the completion of the written comprehensive exams. The oral exam will be conducted during the student's dissertation proposal defense by the student's dissertation committee. Students are encouraged to register for the proposal development course and develop their dissertation proposal. During the oral comprehensive exam, students will be expected to conduct a proposal presentation for their dissertation research topic. During this proposal defense, students will be tested on the proposal as well as topics in health outcomes, statistics/research methods, and the student's selected area of emphasis. Students that pass the oral comprehensive exam will receive an official communication indicating so by their faculty mentor and can proceed with their dissertation research. This communication should be forwarded to the Department Chair. Those that do not pass the oral comprehensive exam will be provided with a second opportunity. If the student is not able to defend the proposal a second time, the student will have a third and final opportunity. If the student cannot adequately defend a proposal on the third attempt, the student will be expelled from the Pharmaceutical Sciences PhD program. The student's faculty mentor will communicate all information to the student and the Department Chair during these proceedings.

Although there are no set criteria for the format of the proposal defense the following format is suggested. At least one week before the scheduled defense, the written proposal must be circulated to the Dissertation Committee. It is strongly suggested that the contents of the written proposal be thoroughly discussed with committee members prior to this step. The proposal defense can take place in a private meeting between the student and the committee members. Although there is no set structure or guidelines for this meeting, the student and/or major advisor can use the following information to guide the meeting. The defense will begin with a brief (approx. 30-45 min) presentation by the student that summarizes the research study and the proposal. The committee may examine the student to understand the student's knowledge regarding the research topic at this time. This examination will focus on the research project proposed by the student but will not be restricted to the project. The committee may also examine the student on relevant information related to the research project such as the literature in the area of the research project and any relevant information from prior course work that the student has completed. At the

conclusion of the defense the committee will make their recommendation. This will be:

- 1) Acceptance of the proposal without modification. In this case the student will proceed with the proposed study as outlined in the proposal.
- 2) Acceptance of the proposal with modification. In this case the committee will make specific recommendations for modification of the proposal that must be incorporated into a revised draft of the proposal.

Rejection of the proposal. **Rejection of the proposal may result from a judgment of the committee that the proposal is inadequately developed and needs more work. In this case the student will be instructed to re-submit the proposal to the committee. The students would be instructed as to what areas require improvement and another defense would be scheduled no later than three months after the initial defense.**

Graduation Process

Students should consult with their faculty mentor when they are ready to graduate from the PhD program. It should be noted that although an example of coursework plan and graduation process is provided, each student in the PhD program will be unique and may have a different set of courses and the expected time to graduate. All students are strongly encouraged to be in constant communication with their Graduate Academic Advisor (GAA).

Dissertation Defense Process

Information regarding University guidelines regulating dissertation deadlines and submissions can be found at the following: Graduate School Guidelines for Dissertation (<http://publications.uh.edu/content.php?catoid=22&navoid=6031>)

Students must successfully defend their dissertation before their dissertation committee. Two manuscripts based on the student's dissertation must have been submitted to peer-reviewed journals prior to scheduling the dissertation defense. The student must submit a reasonably well-polished and well-proofed copy of the full dissertation document to the mentor and all the committee members at least 2 weeks prior to defense. Information regarding College guidelines regulating dissertation deadlines and process can be found at the following: <https://uh.edu/pharmacy/about-us/policies-and-procedures/>

The student is expected to post an announcement of the dissertation defense at least 7 days prior to the date of the defense. The announcement should contain the student's name, dissertation title, mentor's name, location, date, time of the defense, and indicate that it is a dissertation defense (See example in appendix). As procedure, students are requested to forward an electronic copy of the dissertation defense flyer to the Graduate Academic Advisor who will forward it to all faculty and students in the graduate program.

The defense must have an open public and closed session with the committee. The public portion should be presented as a seminar with ample time provided for discussion of the findings by the attendees (usually 45-60 minutes, and 15 minutes for questions). The mentor should lead the defense with an introduction and coordinate the question-and-answer session. It should be noted that all questions regarding a defense should be addressed, and adequate time provided so that the student can defend the dissertation. All graduate students in the program are required to attend each departmental dissertation defense.

Submission of Dissertation Document

The College of Pharmacy uses an electronic thesis/dissertation submission process using the Vireo Thesis & Dissertation Submission System. See the following link for detailed instructions: <https://www.uh.edu/graduate-school/academics/thesis/>

The student must follow all dates published by the University of Houston in the Academic Calendar for applying for graduation, and for submitting the approved dissertation signed by the student, mentor, committee, and Dean. The student must apply for graduation and pay a graduation-processing fee. Typically, this deadline is at the beginning of the semester that the student wishes to graduate. It is the student's responsibility to check with their advisor and apply accordingly. The Graduate Academic Advisor will assist the student in electronic submission.

Guidelines for preparing the PhD Dissertation

The format for the dissertation is at the discretion of the Faculty Mentor and Dissertation Committee. Two format options are available: a chapter-book style or Journal Manuscripts in publishable form (see Appendix). The Manuscript Dissertation format requires at least 3 manuscripts.

The graduate student must submit the required dissertation documents in electronic format. All dissertations should have original signatures of the mentor, committee members and the Dean of the College of Pharmacy. The signature page must be submitted to the GAA for placement in the student file, and not be included in the electronic copy for submission. The electronic submission should be submitted to the Texas Electronic Library via Vireo system by 4:00 p.m. on or before the deadline published by the University of Houston. Please note that to achieve this requirement, students should consider the time it takes for the dissertation defense, corrections after the defense, and finalization of the manuscript for upload. Students can upload their dissertations to the Vireo Thesis & Dissertation Submission System using the following link: <https://uh-etd.tdl.org/>. Accordingly, the student should plan to apply for graduation and the date for the dissertation defense. If the dissertation document is not submitted and approved on time, students will have to postpone their graduation and register for the next semester. The faculty mentor or chair of the dissertation committee has the primary responsibility to evaluate the dissertation content.

Code of Conduct

The Research Trainee Code of Professional Integrity is a comprehensive document that outlines the College of Pharmacy's commitment to fostering an environment conducive to educational and research excellence. This code applies to all research trainees, including graduate students, professional students, postdoctoral fellows, postbaccalaureate students, and undergraduate student trainees. It emphasizes the College's dedication to promoting opportunities for trainees to achieve their educational objectives, cultivate creativity and innovation, and safeguard the health, safety, welfare, property, and human rights of all College members. The code aligns with the University of Houston's policies on student conduct, academic honesty, and ethical conduct for employees. All trainees are expected to adhere to these policies throughout their tenure at the College of Pharmacy. The full text of The Research Trainee Code of Professional Integrity is provided in the appendix of this handbook for reference and guidance.

Graduate Student Grievance Procedures

Grievances resulting from relationships between students and faculty (courses or otherwise) should be handled according to the university-wide procedure described in the Graduate Catalog. The following points are particular to this program: The student should first attempt to resolve the grievance with the faculty member. If an acceptable solution cannot be agreed upon, the grievance should be presented in writing along with supporting documentation to the Department Graduation Education Committee. This formal grievance must state when the student discovered the issue, describe the grievance, provide evidence to support the grievance, and indicate the desired resolution. The formal grievance must be filed no later than 30 days from the point in time when the grievant had knowledge or should have had knowledge of the problem being grieved.

The Chair of the Department Graduation Education Committee will initially mediate the grievance and arrive at a decision acceptable to both parties within 10 working days. The Department Chair, who will be advised of the situation before the resolution is finalized, shall also accept this resolution. If an acceptable resolution cannot be reached by the committee chair, a formal meeting with the committee will be held to recommend a resolution to the Department Chair. The Chair may accept the recommendation of the committee, return the grievance to the faculty for further consideration, or resolve the grievance in another manner. The Department Chair must make a decision within 10 working days of receiving the written committee recommendation, notifying all parties of the decision in writing. A written record of the entire process (including the original grievance filed, all responses and evidence, and the final report of the outcome) will be kept on file in the department.

If either party involved in the grievance is dissatisfied with the outcome of this process, that party may file a formal written appeal with the College of Pharmacy Graduate Studies Committee. The College Graduate Studies Committee is composed of 5 college faculty members and two graduate students, all of whom have voting rights. This committee will have 10 working days to act on the appeal as described above and forward their recommendation to the Graduate Dean or the Dean of the College of Pharmacy. The Dean may accept the recommendation of the Graduate Studies Committee, return the appeal to the Graduate Studies Committee for further consideration, or resolve the appeal in another manner. The Dean must decide within 10 working days of receiving the Committee's recommendation, notifying all parties of the decision in writing. If either party involved is dissatisfied with the outcome of the College process, they may petition for a university level review as described in the graduate catalog. Please check the University Graduate Student catalog or website for an updated copy.

College of Pharmacy Graduate Studies Committee Policies

The College of Pharmacy Graduate Studies Committee has recently adopted college wide policies related to graduate education. These include Transfer Credit Policy, Academic Standard Policy, Responsible Conduct Research Policy, and others. A copy of the policy and procedures governing graduate students in the college of pharmacy can be found at <https://uh.edu/pharmacy/about-us/policies-and-procedures/>

Internship/ F-1 Curricular Practice Training (CPT) Policies

Summer Internship/ CPT

Employment could be part-time or full-time during the summer (May to August).

All PHOP PhD students with good academic standing (cumulative GPA \geq 3.0) are eligible for Summer Internship/ CPT upon approval from Major Advisors.

Fall and Spring Internship/ CPT

Employment is limited to part-time (20 hours per week or less) during the Fall and Spring semester.

PHOP PhD students who have passed the written comprehensive exam are eligible for Fall and Spring Internship/ CPT upon approval from Major Advisors.

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UNIVERSITY of
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COLLEGE OF PHARMACY

PhD in PHOP

*A Graduate Program of Excellence to Develop Leaders
in PHOP Research*

Initial Research Rotation Form

Students are expected to meet with all faculty members in PHOP and understand their research work during the first semester. Students are expected to take a proactive approach to ensure adequate interaction with faculty during the first semester. It is recommended that the student meet and discuss with each faculty at least twice. This will help students select a permanent faculty advisor responsible for overseeing selection of course work, research, and completion of the PhD dissertation. Students are to obtain the signature of the faculty they have met during the first visit. The completed form indicating that a student has met all faculty members should then be provided along with the major advisor selection form to the faculty the student selects as the major advisor. The completed form should be provided to the Director of Graduate Studies.

Student Name and Signature/date

Faculty Name and Signature/date

Faculty Name and Signature/date

Faculty Name and Signature/date

Faculty Name and Signature/date

Faculty Name and Signature/Date

Faculty Name and Signature/date

Faculty Name and Signature/date

Faculty Name and Signature/date

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COLLEGE OF PHARMACY

PhD in Pharmaceutical Health Outcomes and Policy

*A Graduate Program of Excellence to Develop Leaders in
Pharmaceutical Health Outcomes Research*

Faculty Mentor Selection Form

Date: _____

This is to inform that I _____ have selected

Dr. _____ as my faculty mentor for my PhD program.

I have met with the respective faculty member and we have mutually agreed on this decision.

Student Name and Signature

Faculty Name and Signature

(Both student and faculty signatures are required.)

Received by: _____

Chair, Graduate Education Committee, Department of
Pharmaceutical Health Outcomes and Policy

A copy of this document will be provided to both, the student and the faculty advisor.

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A Graduate Program of Excellence to Develop Leaders in Pharmaceutical Health Outcomes Research

PhD Transfer Credit Request Form

Student Name/Signature: _____ **PS ID#:** _____

PhD track: _____ **Semester 1st Enrolled:** _____ **Anticipated Graduation Date:** _____

Transfer Credit: The student may transfer up to 9 credit hours of graduate coursework completed at another institution. A maximum of 18 credit hours of graduate coursework may be transferred if the student completed the MS in Pharmacy Administration program at UH. Only courses with a grade of 'B' or above will be considered for transfer. Courses with S/U grade will not be transferred. All transfer credits should be approved by the Department Chair and abide by the credit transfer policy for the College and the University. Please see the above transfer credit policy prior to requesting transfer credit.

Courses requested to be transferred

Course Number	Course Title	Credit Hours	Date Completed	Grade
Total Hours Requested				

Faculty mentor
Name: _____
Date: _____

Signature: _____

Comments: _____

Chair, Graduate Education Committee, PHOP: _____ **Date:** _____

Approved/Disapproved: Comments: _____

PhD in Pharmaceutical Health Outcomes and Policy

PhD Degree Plan

Student Name: _____

Course Number	Course Title	Credit Hrs	Semester Completed or Expected	Grade
---------------	--------------	------------	--------------------------------	-------

PHOP Core

PHCA 7305	Social and Behavioral Determinants and Theory in PHOP	3		
PHCA 7306	Pharmaceutical Health Outcomes and Quality	3		
PHCA 7320	Introduction to Health Systems and Policy	3		

Research Methods Core

PHCA 7316	Pharmacoepidemiology	3		
PHCA 7307	Epidemiologic Methods and Research Design	3		
PHCA 7330	Advanced Pharmacoeconomics	3		

Statistical Analysis Core

PHCA 7308	Biostatistics and Experimental Design	3		
PHCA 7301	Regression Analysis and Methods	3		
PHCA 7340	Data Analytics for PHOP	3		

Seminar Courses

PHCA 7180	Seminar	1		
PHCA 7180	Seminar	1		
PHCA 7180	Seminar	1		
PHCA 7180	Seminar	1		
PHCA 7180	Seminar	1		
PHCA 7180	Seminar	1		

Dissertation Courses

PHCA 8x98	Doctoral Dissertation Research (minimum18)	23		
PHCA 8199	Doctoral Dissertation Defense	1		

Elective Courses minimum 18 Credit Hours: required of which 9 Hrs. should be 7000 level or above. No more than 9 credit hours may be Special Problems.

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Dissertation Committee Selection Form

Date: _____

Student's Full Name _____

Anticipated Field of Research _____

By signing we have agreed to serve as dissertation committee members for the above-mentioned student. The names and affiliation of the Committee Members should be indicated below.

	Committee Members	Affiliation of Member	Accepted (signature)
1.	_____	_____	_____
	Committee Chair		
2.	_____	_____	_____
3.	_____	_____	_____
4.	_____	_____	_____
5.	_____	_____	_____
6.	_____	_____	_____

Received and approved by: _____

Chair, Graduate Education Committee, Department of
Pharmaceutical Health Outcomes and Policy

A copy of this document will be provided to both, the student and the faculty advisor.

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Pharmaceutical Health Outcomes Research*

Comprehensive Exam and Proposal Defense Approval

Student's Full Name _____

This is to inform that the above-mentioned student has successfully completed:

Date:

Written Comprehensive Exam _____

Area of Emphasis Exam _____

Dissertation Proposal Defense _____

Dissertation Title: _____

Received and approved by: _____

Chair, Graduate Education Committee, Department of
Pharmaceutical Health Outcomes and Policy

A copy of this document will be provided to both the student and the faculty advisor.

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PhD in Pharmaceutical Health Outcomes and Policy

*A Graduate Program of Excellence to Develop Leaders in
Pharmaceutical Health Outcomes Research*

Dissertation Approval Form

Date: _____

Student's Full Name _____

Dissertation Title _____

The above-mentioned student has completed all requirements of the dissertation and has received approval to proceed with uploading of the dissertation to the Vireo Thesis & Dissertation Submission System.

Approved by Committee Chair: _____

Received and approved by: _____

Chair, Graduate Education Committee, Department of
Pharmaceutical Health Outcomes and Policy

A copy of this document will be provided to the student and the faculty advisor.

UNIVERSITY of
HOUSTON

COLLEGE OF PHARMACY

DISSERTATION DEFENSE

Department of Pharmaceutical Health Outcomes and Policy

ALL FACULTY AND STUDENTS ARE INVITED

DISSERTATION TITLE

Student's name

PhD in Pharmaceutical Health
Outcomes and Policy Candidate
College of Pharmacy

University of
Houston

Advisor: **Advisor's Full Name**

When: Month, Day, Year

Where: College of Pharmacy Health 2 Building, Room

XXX Time:

DISSERTATION TITLE

by

NAME OF STUDENT

A dissertation submitted in partial fulfillment of the
requirement for the degree of

DOCTOR OF PHILOSOPHY IN

PHARMACEUTICAL HEALTH OUTCOMES AND POLICY

University of Houston
College of Pharmacy

Month 20XX

The first three pages for the PhD dissertation

Copy Authorization

In presenting this dissertation in partial fulfillment of the requirement for an advanced degree at the University of Houston, I agree that the library shall make it freely available for inspection. I further state that permission for extensive copying of my dissertation for scholarly purposes may be granted by my major advisor, Dean of my academic division, or by the University Librarian. It is understood that any copying or publication of this dissertation for financial gain shall not be allowed without my written permission.

Signed: _____
(Students Full Name)

Dated: _____

DISSERTATION TITLE

To the Faculty of the University of Houston, College of Pharmacy:

The members of the committee appointed to examine the dissertation of _____ find
it satisfactory and recommend that it be accepted on _____.

Committee Chair, (Full Name)

Committee Member, (Full Name)

Committee Member, (Full Name)

Committee Member, (Full Name)

Committee Member, (Full Name)

Dean, (Full name)

GENERAL GUIDELINES FOR DISSERTATIONS

A. Title of Dissertation

A dissertation is a valuable resource for others only if it can be located easily. Modern retrieval systems use the words in the title and sometimes a few other descriptive words to locate a dissertation document. Avoid oblique references, and be sure to use word substitutes for formulas, symbols, superscripts, subscripts, Greek letters, and so on. A good rule is to use a maximum of thirteen words for a title.

B. Page Numbers

Each page in the dissertation document, except the title page, should be assigned a number. The following plan of page numbering is required:

1. For the preliminaries, use small Roman numerals (i, ii, iii, iv, etc.). The Roman numerals should be placed at the bottom center.
2. For the remainder of the work--including text, illustrations, appendices, and bibliography - use Arabic numerals (1, 2, 3, 4, etc.). Each page must be numbered. Use of letter suffixes such as 10a, 10b should be avoided. The numbering begins with 1 and runs consecutively to the end of the document. All page numbers should be centered at the bottom. If the description of an illustration is too long to be placed on the same page, it should be placed on the previous page - not on an unnumbered page.
3. If there are more volumes than one, each volume should contain a title page duplicating the title page of the first volume. If the volumes are separate entities, it would be well to identify them further as Volume I, II, etc. The numbering may follow consecutively from one volume to another or begin with Arabic 1 at each new title page. A maximum of 500 pages can fit in one volume.

C. Margins

1. Left - 1 "
2. Right - 1 "
3. Top - 1 "
4. Bottom - 1 "

D. Reference List

Several citation styles are available like American Psychological Association (APA), Modern Language Association (MLA), American Medical Association (AMA), and Chicago Manual Style (Turabian) to accommodate the diverse areas and needs of researchers in Pharmaceutical Health Outcomes and Policy (<https://guides.lib.uh.edu/citationstyles>). In general, the journals will dictate the type of referencing style that is to be used for manuscripts. Since all dissertation work will be published in journals, students are required to pick one referencing style and use it throughout the dissertation.

E. Font Style

The document must be typed in an easily readable 12-point font, double-spaced. The recommended fonts are Times Roman, Arial, Cambria, Calibri, Palatino, Georgia, and Helvetica.

SAMPLE FORMAT FOR CHAPTER-BOOK

A. Order

The dissertation document must include the following items in the order listed:

1. Blank sheet of paper at the beginning of each copy submitted
2. Copy Authorization Page – All bound copies should have original signature of the student
3. Title Page - Must show the month and year of graduation
4. Signature Page – All copies must have the original signatures of the committee and the dean of the college
5. Acknowledgments – (Preface or Foreword); Optional
6. Dedications – Optional
7. Abstract Page – Include the dissertation title on this page followed by the abstract
8. Table of Contents, List of Tables, List of Figures, List of Acronyms
9. Text
10. Appendix
11. References

B. Text

Although there is no fixed number of pages for the text, it is recommended that the text not exceed a maximum of 500 pages.

It is required that the text chapters be arranged in the following format:

1. Chapter I: Introduction
This chapter is the short summary of the dissertation which ends with the statement of the problem that will be evaluated in the research (5-10 pages)
2. Chapter II: Background/Literature Review
A comprehensive literature of the research being conducted (30-60 pages)
3. Chapter III: Background/Theory
A comprehensive description of the theory or the model that will be tested in the research (30-60 pages)
4. Chapter IV: Methodology
A comprehensive description of all methods used in the study (40-70 pages)
5. Chapter V: Results
Include all results tested in this study (30-60 pages)
6. Chapter VI: Discussion
This chapter should include a discussion of all findings, implications of these findings, limitations of the study, future study recommendations, and conclusions. (40-60 pages)

Note: The pages in parenthesis are only recommendations; there are no limitations on the page numbers.

C. Reference List

For citations in the text, give the author's name and the year of publication (e.g. Last Name, 2000; Last Name and Last Name, 2010; Last Name et al., 2015). In the list of references, entries should be arranged alphabetically by the author and not numbered. All authors' names should be given. The list of references should contain, in sequence, the following information: authors' names and initials, complete title of the cited article, title of the journal in which the article appeared, year of publication, volume number of the journal, issue and pagination.

SAMPLE FORMAT FOR MANUSCRIPT DISSERTATION

A. Order

The document must include the following items in the order listed:

1. Blank sheet of paper at the beginning of each copy submitted
2. Copy Authorization Page – All bound copies should have original signature of the student
3. Title Page - Must show the month and year of graduation
4. Signature Page – All copies must have the original signatures of the committee and the dean of the college
5. Acknowledgments – (Preface or Foreword); Optional
6. Dedications – Optional
7. Table of Contents – All sections with page numbers including Appendices, if any
8. Background and Introduction
9. Manuscript 1
10. Manuscript 2
11. Manuscript 3
12. Conclusions
13. Appendices – Optional

B. Dissertation (sections 8-13)

Section 8: Background and Introduction (min 5 pages)

Background of research problem including literature review of clinical problem and current scientific knowledge, gap in research knowledge to be addressed by this study, overall study design and analytical approach including any overarching conceptual, theoretical or mathematical models being implemented. This section can include and be expanded as needed from the written dissertation proposal. This section should also introduce the 3 manuscripts with coherent presentation of how these manuscripts address the proposed objectives.

Section 9-11: Journal Manuscripts

Full manuscript #1 formatted to meet specifications of journal for submission, e.g. (Abstract, Introduction/ Background, Methods, Results, Conclusions, and References) with all required supporting material including figures, tables, etc. Journal must be identified and cited in PubMed.

Full manuscript #2 formatted to meet specifications of journal for submission, e.g. (Abstract, Introduction/ Background, Methods, Results, Conclusions, and References) with all required supporting material including figures, tables, etc. Journal must be identified and cited in PubMed.

Full manuscript #3 formatted to meet specifications of journal for submission, e.g. (Abstract, Introduction/ Background, Methods, Results, Conclusions, and References) with all required supporting material including figures, tables, etc. Journal must be identified and cited in PubMed.

Section 12: Conclusions (min 5 pages)

Final statements discussing the overall study conclusions and implications for future research, clinical practice and pharmaceutical health policy. This section could take the form of an Executive Summary, including brief restatements of the overall research problem and models implemented, where findings are related back to study hypotheses, models, and implications are clearly articulated for future research, practice and policy.

Section 13: Appendices (optional as needed)

Provide title for each and include in Table of Contents.

University of Houston College of Pharmacy Research Trainee Code of Professional Integrity

(COP faculty approved; May 20, 2022)

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Objective Statement

The *Research Trainee Code of Professional Integrity* emphasizes the College of Pharmacy's commitment to promoting opportunities for trainees to attain their educational objectives and goals, to build an intellectual environment to generate creativity and innovation, all while protecting the health, safety, welfare, property, and human rights of all members of the College.

This *Code of Professional Integrity* applies to all trainees engaged in research activities including graduate students, professional students (i.e., Pharm.D., M.D., etc.), postdoctoral fellows, postbaccalaureate students, and undergraduate student trainees. All trainees need to adhere to these policies.

All graduate programs at the College of Pharmacy will follow the University of Houston policies and procedures regarding the student code of conduct. General expectations and policies of student behavior can be found in the University of Houston's "[Student Code of Conduct](#)". Any trainees who are University of Houston employees that are not also students (i.e., postdoctoral fellows) are expected to comply with the University of Houston's "[Ethical Conduct of Employees](#)".

College of Pharmacy Academic Honesty Policy

All graduate programs at the College of Pharmacy will follow the University of Houston policies and procedures regarding academic honesty. General expectations and policy of ethical standards and integrity can be found in the University of Houston's "[Academic Honesty Policy](#)". Standards of academic honesty and professional integrity are intuitively understood and cannot be listed exhaustively. However, guidance in these matters is listed below and is designed to handle these cases in fairness to all concerned. This policy applies to those acts of dishonesty committed by a student while enrolled at the University of Houston within the College of Pharmacy.

The sections below highlight the means of reporting an alleged violation(s), and the proceedings that follow. Definitions of key language can be found within "Article 1. General Provisions" of the University's Academic Honesty Policy. "Academic dishonesty" means employing a method or technique or engaging in conduct in an academic endeavor that contravenes the standards of ethical integrity expected at the University of Houston or by a course instructor to fulfill any and all academic requirements. "Departmental Hearing Officer" refers to the person responsible for facilitating the departmental procedures related to the alleged violation(s)

of the academic honesty policy. Typically, the department chair or an individual designated by the department chair serves in this role. In the case of the latter, the department chair will appoint a tenured or tenure-track faculty member within their department to serve as the Department Hearing Officer. The Department Hearing Officer's responsibilities, as described below, shall report their findings to their Department Chairperson and Assistant/Associate Dean of Graduate Programs.

Categories of Academic Honesty

Plagiarism

a. Representing as one's own work the work of another without acknowledging the source (plagiarism). This would include submitting substantially identical laboratory reports or other materials in fulfillment of an assignment by two or more individuals, whether or not these used common data or other information unless this has been specifically permitted by the instructor. Plagiarism includes copying verbatim text from the literature, whether printed or electronic, in written assignments, candidacy exams, and theses/dissertations.

Cheating and Unauthorized Group Work

b. Openly cheating in an examination, as copying from another's paper.

c. Being able to view during an examination, quiz, or any in-class assignment, an electronic device that allows communication with another person, access to unauthorized material, access to the internet, or the ability to capture an image, unless expressly permitted by the instructor.

d. Using and/or possessing "crib notes," as unauthorized use of notes or the like to aid in answering questions during an examination.

e. Giving or receiving unauthorized aid during an examination, such as trading examinations, whispering answers, passing notes, and using electronic devices to transmit or receive information.

f. Securing another to take a test in the student's place. Both the student taking the test for another and the student registered in the course are at fault.

Fabrication, Falsification, and Misrepresentation

g. Changing answers or grades on a test that has been returned to a student in an attempt to claim instructor error.

h. Using another's laboratory results as one's own, whether with or without the permission of the owner.

i. Falsifying results in laboratory experiments.

j. Misrepresenting academic records or achievements as they pertain to course prerequisites or corequisites to enroll or remain in a course for which one is not eligible.

k. Representing oneself as a person who has earned a degree without having earned that particular degree.

Stealing and Abuse of Academic Materials

l. Stealing, as theft of tests or grade books, from faculty offices or elsewhere, or knowingly using stolen tests or materials in satisfaction of exams, papers, or other assignments; this includes the removal of items posted for use by the students.

m. Mutilating or stealing library materials; misshelving materials with the intent to reduce accessibility to other students.

Complicity in Academic Dishonesty

n. Failing to report to the instructor or departmental hearing officer an incident that the student believes to be a violation of the academic honesty policy.

Academic Misconduct

o. Any other conduct that a reasonable person in the same or similar circumstances would recognize as dishonest or improper in an academic setting.

Sanctions

The sanctions for confirmed violations of this policy shall be commensurate with the nature of the offense and with the record of the student regarding any previous infractions. Sanctions may include but are not limited to a lowered grade, failure on the examination or assignment in question, failure in the course, probation, suspension, expulsion from the University of Houston, or a combination of these.

Departmental Hearing

When an instructor (i.e., faculty member, advisor, mentor, etc.) has reasonable grounds to believe that a student has committed an act of academic dishonesty, the instructor shall notify the Departmental Hearing Officer of the concerned department, in writing, within five class days of discovery.

Students who believe they have *observed* an act of academic dishonesty shall report the incident to the instructor, as soon as possible, who shall then report the incident in writing to the Departmental Hearing Officer within five class days.

The Departmental Hearing Officer will check to see if the accused student has any prior violations of academic honesty listed with the Provost Office. A student is eligible for a waiver of departmental hearing only if he/she has no prior waiver of departmental hearing and no previous findings of a violation of the Academic Honesty Policy.

Waiver of Departmental Hearing

Upon notifying the Departmental Hearing Officer of the alleged violation, the instructor member shall have the option of suggesting to the Departmental Hearing Officer a sanction for the alleged violation of the Academic Honesty Policy that would, if acceptable to the student, instructor, and Departmental Hearing Officer, preclude a departmental hearing. Such sanctions would normally include reduced or zero credit for a test assignment, a grade of “F” in a course, or other such agreed upon sanctions. Sanctions involving disciplinary probation or sanctions requiring a college level hearing cannot be used.

In cases for which the instructor suggests a sanction to preclude the departmental hearing, within five class days of receiving the instructor’s report the accused shall be notified, in writing, by the Departmental Hearing Officer informing the accused student of the nature of the violation, the recommended sanction, and ask the student to select between the choice of *either* (1) admitting the alleged academic honesty violation, waiving the formal departmental hearing, and accepting the associated sanction or (2) proceeding to a formal departmental hearing.

The waiver of a departmental hearing must be agreed to by the instructor, the student, and the Departmental Hearing Officer. In the event that all three cannot agree to a waiver, the case must be moved to a formal departmental hearing.

The waiver of a departmental hearing is agreed to by completing a departmental hearing waiver form that must be signed by the student, instructor, and Departmental Hearing Officer. Upon agreement of the waiver of departmental hearing, a copy of the completed waiver form will be shared with the College’s Assistant/Associate Dean of Graduate Programs and the University’s Provost’s Office to be included on a list of recorded cases of academic honesty violations. Following graduation, the student can request that his/her name be removed from these lists. An agreement to settle an academic honesty infraction via a waiver of the formal departmental hearing will not result in any record being kept that is reflected on the student’s transcript.

If the Departmental Hearing Officer has not received a response from the student within 10 class days of the notification of these options, the Departmental Hearing Officer shall, within the next five class days, schedule a departmental hearing.

Departmental Hearing Procedures

In case a waiver of a departmental hearing is not an option, the Departmental Hearing Officer shall, within 10 class days of receiving the instructor's report, schedule a departmental hearing. At least 10 class days prior to the departmental hearing, the Department Hearing Officer shall notify the instructor, the accused student, and the accusing party, if other than the instructor, of the nature of the alleged violation and the time, place, and date of the hearing. Should any of the parties fail to appear, without good cause, at the departmental hearing, the Departmental Hearing Officer may render a decision in their absence.

Both the instructor and the student shall have an opportunity to present their cases during the above hearing. This may include the introduction of documents and/or physical evidence as well as statements from individuals who have knowledge of the circumstances. If either party intends to have individuals appear at the hearing for such statements, the Departmental Hearing Officer must be notified at least three class days before the hearing. Both parties have an opportunity to examine the documents pertaining to the alleged violations during the hearing.

If either party intends to have legal counsel attend the hearing, the Departmental Hearing Officer must be notified at least three class days before the hearing. The hearing cannot be held with such counsel in attendance unless a representative from the University of Houston Office of General Counsel is also present. If either party will be advised by legal counsel, this individual may attend the hearing but shall not directly participate in the hearing or enter into discussion with the parties present.

If physical evidence or witness testimony is presented in a departmental hearing, and if either party needs reasonable time to review the evidence and/or consider the witness testimony, either party may request a postponement of the departmental hearing. Decisions on the postponement of the hearing will be made at the discretion of the Departmental Hearing Officer.

The Departmental Hearing Officer shall render a decision within three class days after the hearing and forward copies of the decision to the student, instructor, and College Hearing Officer of the college responsible for the course in which the alleged violation occurred; where the College Hearing Officer shall be appointed by the Dean of the College. Both the accused student and the instructor have the equal option of appeal if the decision of the Departmental Hearing Officer is not acceptable. If either the student or the instructor wishes to appeal the decision, he or she must file a written request for a hearing with the College Hearing Officer within 10 class days after receipt of the Departmental Hearing Officer's decision.

If a written appeal is not received by the College Hearing Officer of the college within 10 class days of the decision at the departmental level, the action recommended by the Departmental

Hearing Officer shall be implemented and the Dean's Office of the College and the University's Provost's Office shall be notified of the outcome of the case. A departmentally recommended sanction involving suspension or expulsion shall be reviewed in a college hearing unless such hearing is waived.

College Hearing Procedures

If a written appeal is received by the College Hearing Officer of the college within 10 class days of the decision at the departmental level, the College Hearing Officer shall, within 10 class days of receiving the request, schedule a college hearing before the College Hearing Board. The college hearing is a de novo hearing in which the College Hearing Board must consider all the evidence on all the issues presented in the appeal as though no previous action has been taken.

The College Hearing Board shall be comprised of the College Hearing Officer and the College's Graduate Education Committee where the Graduate Education Committee is made up of a Graduate Education Committee Chair, a faculty member representing each of the College's departments, and a graduate student representing each of the College's departments. Each member of the College Hearing Board, including the graduate students representing each of the College's departments, shall have voting rights.

At least 10 class days prior to the college hearing, the College Hearing Officer shall notify the College Hearing Board, the instructor, the accused student, and the accusing party, if other than the instructor, of the nature of the alleged violation and the time, place, and date of the hearing. Should any of the parties fail to appear, without good cause, at the college hearing, the College Hearing Officer, upon recommendation of the College Hearing Board, may render a decision in their absence.

Three class days prior to the hearing, all parties shall notify the College Hearing Officer in writing of the names of their witnesses, if any, and the subject of their testimonies. At that time, the parties will also submit a copy of the documents they intend to present during the hearing. Upon request, the College Hearing Officer will make available to the parties the information and documents referenced in this section. All parties shall be afforded the opportunity to present statements, pertinent documentation and witnesses and have an opportunity to examine the documents pertaining to the alleged violations during the hearing.

If either party intends to have legal counsel attend the hearing, the College Hearing Officer must be notified at least three class days before the hearing. The hearing cannot be held with such

counsel in attendance unless a representative from the University of Houston Office of General Counsel is also present. If either party will be advised by legal counsel, this individual may attend the hearing but shall not directly participate in the hearing or enter into discussion with the parties present.

The cases presented to the College Hearing Board must be made by the accusing individual and the accused student. The instructor or other individuals who reported the alleged misconduct shall present the relevant information, including statements by witnesses. The accused student shall then present his/her statement and relevant information, including statements by witnesses. Neither party shall ask questions of or solicit answers directly from the other party or its witnesses. Where it appears that there are matters of disputed fact, the College Hearing Officer shall request the College Hearing Board to ask appropriate questions of either or both parties and/or their respective witnesses so as to clarify the points in dispute

At the conclusion of each phase of the hearing, the College Hearing Board shall meet in a closed session to render a decision. A student is found in violation of the College of Pharmacy Academic Honesty Policy by a vote of four or more members of the College Hearing Board, and the sanction has to be agreed to by three or more members of the College Hearing Board. Upon reaching a decision in either phase, the College Hearing Board shall reconvene with all parties present and inform all parties of its judgment.

The College Hearing Officer shall notify in writing all parties, including the dean of the college and the provost, of the disposition of the case within five class days of receipt of the College Hearing Board's judgment.

To see the procedure for the college hearing go to "Article 6.06 College Hearing" of the University's Academic Honesty Policy.

Within five class days of the College Hearing Board's decision, either party may file an appeal for review with the provost or that officer designated by the provost. The appeal shall be in writing and shall specifically address the issues to be reviewed. If a written appeal is not received by the provost within five class days of the College Hearing Board's decision, the action of the College Hearing Board shall be implemented.

To see the procedure of the Provost Appeal, go to Article 7 "Senior Vice President for Academic Affairs and Provost Appeal" of the University's Academic Honesty Policy

College of Pharmacy Research Misconduct Policy

Research Misconduct Definition

The research conducted within the College of Pharmacy follows the policies and procedures defined by the University of Houston's Division of Research. Resources concerning the Responsible Conduct of Research (RCR) can be found [here](#) and the entire policy can be found in "[UH Full Research Misconduct Policy](#)".

As defined by the Department of Health and Human Services (DHHS) Office of Research Integrity (ORI) and the National Science Foundation (NSF), research misconduct means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results, including:

- a. *Fabrication*: making up data or results and recording or reporting them;
- b. *Falsification*: manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record; and
- c. *Plagiarism*: the appropriation of another person's ideas, processes, results, or words without giving appropriate credit.

Research misconduct does not include honest errors or differences of opinion.

Laboratory Safety and Record Keeping

To comply with laboratory safety protocols within the University of Houston, it is required that laboratory information be recorded in English. This specifically applies to laboratory notebooks, documents, and reagents. Note that if reagents are not labeled in English before arriving in the laboratory, they must then be translated into English before entering the laboratory. For safety, discussing professional and/or laboratory matters with personnel in a language other than the English language, either in the laboratory or in the common areas is considered misconduct by this policy. Additionally, it should be noted that record keeping for funded research must comply with being legible, clear, timely, thorough, complete, secure, and well-organized while being in English.

Intellectual Property

The UH System Board of Reagent Policies outlines intellectual property in section [21.08 Intellectual Property](#). Written there it states:

"Copyrighted material", or "work of authorship" means original expression that is fixed in any tangible medium of expression and subject to copyright protection under Title 17 of the United States Code as it now exists or as it may be amended. Under federal law, copyright subsists from the moment of the work's creation, although protection may be enhanced by registration with the United States Copyright Office. Works of authorship currently include 1. Books, journal articles, texts, glossaries, bibliographies, study guides, laboratory manuals, syllabi, tests, and survey instruments; 2. Lectures and unpublished lecture notes; 3. Musical works; 4. Dramatic works; 5. Works of visual art, such as sculptures and drawings; 6. Architectural works; 7. Films, audiovisual works, slide programs, film strips; 8. Sound recordings and video recordings containing original performances; 9. Programmed instruction materials; 10. Computer programs and documentation.

The College of Pharmacy's *Research Trainee Code of Professional Integrity* defines that all students must protect the intellectual property of the research advisor/mentor and the laboratory's research program.

Research trainees are required to support the protection of intellectual property by the advisor/mentor. This includes the understanding that there may be some delays in the publication of data in journal articles, abstract submissions, and/or research presentations. Claims of inventorship in intellectual property applications require significant intellectual or technical input. Inventorship on an intellectual property application is based upon two items: (1) *Contribution of ideas*, resulting in a claim, and (2) *Reduction to practice*, (i.e., the physical part of the inventive act) where there was work involved in actually generating proof. If a student feels that they have been unfairly excluded from an invention disclosure, the trainee should address the issue with their advisor/mentor. If the trainee and advisor/mentor cannot come to an agreement, then they are to reach out to the UH Office of Technology Transfer (OTTI) to discuss their concerns. This should be followed by submitting a formal petition to the College of Pharmacy's *Graduate Studies Committee* (GSC). It is to be noted that the royalty allocations are solely at the discretion of the advisor/mentor (i.e., Principal Investigator; PI).

In addition, research data generated within the College of Pharmacy are the property of the college and are to remain in the College, Department, and/or laboratory upon graduation from the program or upon separation from the University/College. All research data must be recorded in English.

Collaborations

Unique to the College of Pharmacy's *Research Trainee Code of Professional Integrity* is the statement of unauthorized collaborations. Research Trainees are required to obtain approval

from their advisor/mentor to initiate collaboration(s) on an academic and/or research project(s) with another independent investigator. If the student's graduate advisor/mentor does not approve the collaboration before the collaboration starts, the student may then submit a formal petition to the College of Pharmacy's *Graduate Studies Committee* (GSC).

Claims of Authorship

The University of Houston's policies and procedures does not specifically address the pursuit of unreasonable claims of authorship on scientific publications, but it does have a university-wide policy and procedure, for graduate, and professional students, to apply to the *redress of grievances* (i.e., "the right to make a complaint to or seek the assistance of, one's [university], without fear of punishment or reprisals") concerning academic and instructional matters and other issues for which there are no other existing grievance procedures. The policy can be found here "[Grievance Policy and Procedure for Graduate, Professional Students](#)".

The College of Pharmacy's *Research Trainee Code of Professional Integrity* defines unreasonable claims of authorship as demanding authorship without significant intellectual or technical input. At a minimum, the requirement for authorship is to be in consultation and discretion of their faculty advisor/mentor. If the research trainee's advisor/mentor does not approve the research trainee's claim of authorship, the university-wide grievance policy and procedure will be followed.

College of Pharmacy Professionalism of Research Trainees

Dress Code

The University of Houston's policies and procedures does not specifically address a student dress code. The College of Pharmacy's *Research Trainee Code of Professional Integrity*'s statement of unprofessional appearance and behavior will follow the *Student Dress Code* policy found within the College of Pharmacy's current "[Pharm.D. Student Handbook](#)" as well as the singular policy "[Professional Dress Code](#)". Due to the nature of the trainee's unique role in the College of Pharmacy, additional measures are required. The unprofessional dress code and appearance of research trainees are defined as inappropriate clothing and/or general appearance while pursuing their academic mission (i.e., studying, researching, and working) either on the University of Houston campus or while representing the College of Pharmacy in scientific and other formal meetings. This policy applies to all research trainees engaged in research and/or enrolled within the College of Pharmacy. Examples of approved men's attire include polo-style

shirts, collared shirts, slacks, and khakis/denim pants. Examples of approved women's attire include polo-style shirts, collared shirts, blouses, slacks, khakis/denim pants, skirts/dresses, and capris. Also, leggings may be worn under other attire. Examples of unacceptable attire include hats (other than those required for religious purposes), baggy or sagging pants/bottoms, shorts, mini-skirts, mid-drifts or low-cut tops, backless clothing, tank tops, spaghetti strap tops, cut-off shirts, pajamas, slippers, and flip-flop sandals. These standards of attire are intended to be self-regulated.

When a trainee is performing research activities within a research laboratory, the dress code will follow the policy found in the University of Houston's Environmental Health and Safety (EHS) current "[Chemical Hygiene Plan](#)". Specifically, legs and feet must be covered by closed-toe shoes, long pants or skirts which fully cover the legs (no sandals, open-toed shoes, or shorts), long hair must be confined, and loose clothing and jewelry must be secured before beginning work.

A professional dress code and appearance must be followed for all research trainees when disseminating research findings (i.e., seminar presentations, poster/oral presentations, proposal defense and dissertation defense presentations, and while attending local/regional/national/international meetings, conferences, symposia, and/or other similar formal meetings) and when a research trainee is performing Teaching Assistant (TA) assignments and duties (i.e., proctoring Pharm.D., quizzes/exams, skill labs, and other similar duties).

College of Pharmacy External Representation by Research Trainees

The University of Houston's policies and procedures does not specifically address unprofessional behavior at off-campus scientific conferences and meetings. The College of Pharmacy's *Research Trainee Code of Professional Integrity* defines unprofessional behavior at off-campus scientific conferences and meetings as not fulfilling the expected responsibilities of the scientific conference or meeting. Examples of unprofessional behavior include not showing up for their scientific poster presentations, leaving their posters unattended for long periods, and using scientific conference time for excessive sightseeing. During the meeting time, attendance is expected, and that research trainee activity involves attending scientific session presentations, workshops, etc. Failure to professionally represent the College of Pharmacy in off-campus, scientific conferences or events can result in the prevention of future attendance to such events and an advisor/mentor withholding a letter of recommendation. Additionally, allegations of such

behavior can be reported using the academic honesty policy procedures based on the situation's associations with enrollment in research hours.

Short Term Leave and Absences

The College of Pharmacy's *Research Trainee Code of Professional Integrity* defines unexcused absences as not showing up for classes, lab research work, or taking unauthorized and/or non-informed travel/vacations (i.e., domestic vacations, foreign vacations, and/or vacation time in general). This policy applies to all graduate students including but not limited to TAs, RAs, and scholarship students (whether funded by a domestic or international agency, institution, government, etc.). Graduate students must obtain approval from their faculty advisor/mentor and the College of Pharmacy before travel/vacation plans are considered. The graduate student policy for short-term leave and additional time off are outlined in the "[Ph.D. Student Policies and Procedures](#)". Failure to adhere to these policies can be reported to the Assistant/Associate Dean for Graduate Programs for lack of satisfactory academic progress.

College of Pharmacy Research Trainee Acknowledgement and Pledge

All research trainees, as defined above, within the College of Pharmacy at the University of Houston are required to read and then sign the following *Research Trainee Code of Professional Integrity* pledge, both (1) before the beginning of their position as a research trainee and (2) at the time of petitioning for the advancement of their positions (i.e., Ph.D. or M.S.). The research trainees will *Acknowledgement and Pledge* the following *Research Trainee Code of Professional Integrity*:

- I acknowledge and certify that I have read and understood the objectives and principles of the *University of Houston College of Pharmacy Research Trainee Code of Professional Integrity*, and further, I agree to uphold and abide by the provisions contained therein, effective immediately and until my enrollment in the University of Houston College of Pharmacy is terminated.
- The Office of the Dean will deny admission into the graduate program and/or the capacity to function as a research trainee as defined within this *Code of Professional Integrity*, to any applicant or research trainee who refuses to sign this pledge.

This *Research Trainee Code of Professional Integrity* includes following the policies and procedures of the University of Houston and College of Pharmacy in the order they appear within this policy: (1) University of Houston’s “[Student Code of Conduct](#)”, (2) University of Houston’s “[Ethical Conduct of Employees](#)”, (3) University of Houston’s “[Academic Honesty Policy](#)”, (4) University of Houston’s Division of Research “[Responsible Conduct of Research](#)”, (5) University of Houston’s Division of Research “[UH Full Research Misconduct Policy](#)”, (6) UH System Board of Regents Policy “[Intellectual Property](#)”, (7) University of Houston’s “[Grievance Policy and Procedure for Graduate, Professional Students](#)”, (8) University of Houston’s College of Pharmacy “[Pharm.D. Student Handbook](#)”, (9) University of Houston’s College of Pharmacy “[Professional Dress Code](#)”, (10) University of Houston’s Environmental Health and Safety “[Chemical Hygiene Plan](#)”, and (11) University of Houston’s College of Pharmacy “[Ph.D. Student Policies and Procedures](#)”.

Signature: _____

Research Trainee

Date: _____

Printed name: _____

Research Trainee

Date: _____