



BROWN
School of Public Health

Department of Health Services, Policy and Practice

Health Services Research Doctoral Program
Handbook 2018-2019 Academic Year

Health Services Research Doctoral Program Handbook

Dear Students,

Welcome to the Department of Health Services, Policy and Practice PhD program in Health Services Research at Brown University's School of Public Health. This handbook provides information about the policies and procedures to guide the completion of your doctoral degree. Information about University Doctoral and Graduate student policies can be found in the [Graduate School Handbook](#).

Inside this handbook, you will find information about degree requirements, financial support and mentoring. We hope that this is a useful resource to you during your time in the program.

Yours Sincerely,

A handwritten signature in black ink, appearing to read "Amal Trivedi". The signature is fluid and cursive, with the first name "Amal" and last name "Trivedi" clearly distinguishable.

Amal Trivedi, MD, MPH
Graduate Program Director

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|---|-----------|
| PROGRAM DESCRIPTION | 4 |
| ADMISSION REQUIREMENTS | 5 |
| BASIC DEGREE REQUIREMENTS | 5 |
| OTHER REQUIREMENTS TO GRADUATE | 6 |
| <i>Journal Club and Faculty Forum</i> | 6 |
| <i>Seminars</i> | 8 |
| <i>Teaching Requirements</i> | 8 |
| DOCTORAL DEGREE PROGRAM | 10 |
| PROGRAM COURSEWORK AND SAMPLE CURRICULA | 13 |
| SPECIALTY TRACKS | 15 |
| <i>Specialty in Pharmaceutical Health Services Research</i> | 16 |
| <i>Specialty in Health Economics</i> | 17 |
| MENTORING | 19 |
| <i>Individual Development Plan Policy</i> | 19 |
| <i>Academic advising/mentoring</i> | 20 |
| <i>Research mentoring</i> | 20 |
| <i>Peer mentoring program</i> | 21 |
| <i>Alumni connections program</i> | 21 |
| THE DISSERTATION | 21 |
| <i>Selecting a dissertation chair and dissertation mentoring team</i> | 21 |
| <i>Oral Qualifying Exam (Thesis Proposal)</i> | 22 |
| <i>Dissertation Defense</i> | 23 |
| STUDENT EVALUATION | 25 |
| <i>Student Academic Standing Evaluations</i> | 25 |
| <i>Qualifying exams</i> | 25 |
| <i>Written exam – methodologic competencies</i> | 26 |
| <i>Written exam – theory/ substantive</i> | 26 |
| ACADEMIC POLICIES, PROCEDURES AND FINANCIAL SUPPORT | 27 |
| <i>Grades and Course Credit</i> | 27 |
| <i>Transfer Credits</i> | 27 |
| <i>Financial Information for PhD Students</i> | 27 |
| <i>Research Assistantships</i> | 28 |
| <i>Policy on Vacation Time for Supported Students</i> | 30 |
| <i>Policy on Work During the Summer</i> | 31 |
| <i>Support for Student Parents</i> | 31 |
| <i>Facilities/Space</i> | 32 |
| <i>Laptop Computers</i> | 32 |
| <i>Student Membership on Departmental Committees</i> | 32 |
| <i>Grievances</i> | 33 |
| <i>Language and Writing Assistance</i> | 33 |

PROGRAM DESCRIPTION

Long before the Affordable Care Act, the management and delivery of health care services has been near the top of the national agenda. Currently, the health care industry is one of the nation's largest employers with \$3.3 trillion in total expenditures representing 17.9% of the Gross Domestic Product (GDP) in 2016. Representatives at all levels of government have been involved in the national healthcare debate, including the Supreme Court with three landmark decisions in 2012, 2014, and 2015. As a result, there is a high demand for well-trained professionals to focus on the study of health care systems, health care quality, organization and financing of medical care, patient-provider relationships, clinical management, understanding utilization patterns, development of health information systems, and policy analysis. Indeed, employment of professionals appropriate for those with a health services research doctoral degree has been forecast to grow, with some projections forecasting 23% growth from 2012-2022.

Health services research examines how people access health care, components and impacts of health care costs, and what happens to patients as a result of this care. The main goals of health services research are to identify the most effective ways to organize, manage, finance, and deliver high quality care; reduce medical errors; and improve patient safety. Health services research is a multidisciplinary field of scientific investigation that studies how social factors, financing systems, organizational structures, care processes, health technologies, and personal behaviors affect access to, the quality of, and the cost of health care for the purpose of designing interventions at the level of policies, institutions and individuals with the goal of improving population health.

The doctoral program in health services research at Brown University seeks:

- **To develop scientists experienced in the use of state-of-the-art experimental and non-experimental research methods for the purpose of advancing fundamental knowledge of issues central to the improvement of population health by focusing on the organizational characteristics of health care delivery system providers, economic forces that shape consumer and provider behavior, and the policy environment in which these relationships exist. And to promote rational decision making through research synthesis and evidence contextualization.**
- **To develop scientists skilled in the communication of scientific knowledge; both to contribute to the discussion and to the training of the next generation of health services researchers.**
- **To develop scientists to optimally contribute as part of multidisciplinary teams in academic posts, government agencies at the state, federal, and international level, and research arms of private sectors of health service delivery organizations.**
- **To develop scientists equipped with the skills to lead independent studies for the purpose of improving services and influencing health policy at the organizational, state, national, and international levels such that those policies lead to more equitable health outcomes and equitable use of resources.**

The educational philosophy of the doctoral program in health services research incorporates active experiential learning as a complement to classroom work. The program seeks to train students to communicate across disciplinary boundaries. The identification of each student's specific goals emerges and evolves during extensive mentoring that begins at matriculation and continues throughout the student's career in the program.

ADMISSION REQUIREMENTS

The anticipated student mix includes clinicians and non-clinicians, as well as a mix of students with master's level training in a variety of disciplines including public health, statistics, economics, mathematics, sociology, epidemiology, and pharmacy. We train clinicians (MD, PharmD, RN) who have (or are applying for) NIH Career Development ("K") awards or post-doctoral fellowships enabling their pursuit of advanced training. Admission is open to those with and without relevant post-college training although those with a master's degree or relevant doctoral training are preferred. Regardless of disciplinary background, only applicants with a relevant master's degree may petition to transfer credits to count toward the doctoral degree [See General Public Health Graduate Programs Description.]

Students wishing to pursue graduate work in Health Services Research must complete a Sophas application at <https://sophas.org>. Materials are available directly from the Graduate School and at the Graduate School Website <http://gradschool.brown.edu/go/admission>. Applicants are required to submit GRE exam scores. Test scores older than five years require retesting, consistent with ETS standards. Other standardized tests (e.g., MCAT, LSAT) may not substitute for the GRE. Subject test scores can be submitted but are not required. TOEFL scores are required for a student whose native language is not English, but may be waived for those who hold a bachelors or master's degree from a college or university in the United States or a non-U.S. university where the primary language of instruction is English.

BASIC DEGREE REQUIREMENTS

For a full-time graduate student, a tuition unit is earned while taking a course, serving in a paid research role or serving as a Teaching Assistant. Doctoral students earn four tuition units for each semester that they are enrolled in at least three courses, which is considered full-time. The final tuition unit is earned through research work, or a teaching assignment. Full-time students may take a maximum of five courses per semester. Students appointed as TA or RA typically take three courses per semester; those appointed as Fellow without a work requirement may take four courses. Most students take three or four courses per semester before being admitted to candidacy.

For all PhD students, 24 tuition units are required if matriculating into the program without a master's degree; 16 are required beyond a master's. The normal residency requirement is the equivalent of

three years of full-time study beyond the bachelor's degree. NOTE: All students must complete all tuition units before entering the PhD candidacy.

In addition to mastering the content of the degree, students also have other goals related to, but not explicitly part of a “traditional degree program”. The program is tailored to the needs of the student through the careful selection of courses, round table discussions, seminars, professional meetings and student membership in organizations, other experiences beyond the classroom, and the dissertation topic. Specific tailoring is done to maximize the potential for meeting the long-term goals of the individual student.

OTHER REQUIREMENTS TO GRADUATE

Beyond the required coursework (as detailed above) and the comprehensive exam, oral exam and thesis/dissertation defense, students are also required to

1. Participate in Journal Club/Faculty Forum.
2. Attend HSR seminar series.
3. Complete required ethics training in first year.
4. Complete PHP1001 (waivers no longer allowable)
5. Develop experience and expertise in teaching (see page 10).
6. Submit external dissertation grant (see page 29).

Journal Club and Faculty Forum

One of the Program’s priorities is that graduate students become competent in written and oral communication of scientific thinking. One strategy for the support and development of communication skills is the participation in Journal Club and Faculty Forum. Regular attendance at the *Journal Club/Faculty Forum* is required of all students throughout their time in the PhD program unless there is a time conflict with another requirement. Such conflicts must be approved by the Director of Graduate Studies.

In addition to regular attendance throughout their degree, students are responsible for organizing Journal Club/Faculty Forum for one semester. To do this, students must register for PHP2950 – Doctoral Seminar in Public Health and undertake the responsibilities described below. Students will receive a tuition unit for their coordination of Journal Club/Faculty Forum.

The objective of the Journal Club is to provide doctoral students with a regular, peer-led, semi-structured discussion forum in which they:

- Critically appraise empirical, methodological, or theoretical papers in their field;
- Improve oral and written presentation skills through scholarly debate about weekly topics;
- Increase awareness about faculty and student-initiated research in the School of Public Health;
- Share preliminary drafts of research reports, applications, presentations, and obtain feedback from peers;
- Provide mutual support with regards to course work, RA/TA activities, job searches, etc.

Approximately three journal clubs each semester are substituted with Faculty Forum. Faculty Forum provides a venue for faculty trainers to engage students interactively while describing research opportunities in the program and to promote understanding across public health disciplines. The forum lasts approximately one hour and each faculty member is paired with a 2nd or 3rd year student to assist in logistics and development. Elements of the forum include presentation and interaction about the important questions that define the faculty member's broad research agenda, what specific aspects of research motivates the faculty member, what is currently being worked on, and what opportunities exist for students.

Meeting Schedule:

- Journal Club meetings for the Doctoral Program in Health Services Research occur on Mondays at noon in room 636.

Instructor of Record:

- Every departmental journal club will have an Instructor of Record and is required to notify the Associate Dean and Academic Program Manager of the Instructor name prior to pre-registration. The Instructor of Record of the Journal Club for the Doctoral Program in fall 2018 is Omar Galarraga, Associate Professor in the Department. The spring 2019 semester's Instructor of Record is Amal Trivedi, Associate Professor in the Department and Graduate Program Director (GPD).
- Primary responsibilities include: attending the first meeting of each semester to review guidelines; reviewing attendance; assisting in selection of articles upon request; attending additional Journal Club meetings upon request.
- The instructor of record will be assigned a section under PHP2950.

Attendance Policy:

- Every doctoral student in the School of Public Health is required to attend Journal Club each semester while enrolled in the program unless exempted by his/her Director of Graduate Studies.
- The GPD should notify the Instructor of Record, in writing, of any exemptions being granted each semester.
- Doctoral students organizing Journal Club for the semester should register for Journal Club course credit (PHP2950) one time during their enrollment in the program, typically during their 2nd or 3rd year.

Responsibilities

Journal Club Leadership: Doctoral students must serve as Journal Club Leaders for one full semester, typically during their 2nd or 3rd year. Students may serve as co-Leaders depending on cohort size.

Student leaders are responsible for:

- Coordinating/assigning weekly student discussion facilitators (including sending reminders; circulating papers in advance).
- Maintaining the semester Journal Club schedule (typically done at the beginning of the Fall semester for the entire year, see example attached).
- Organizing three faculty forum per semester.
- Recording attendance for the Instructor of Record.
- Ordering food, as needed, with the assistance of the Academic Program Coordinator.

- The Journal Club budget for the Doctoral Program in Health Services Research is \$510.

Students Discussion Facilitators will:

- Identify an article or project in-progress for their session.
- Create a set of discussion questions.
- Send the article (published or draft, as appropriate) and discussion questions to the students one week before their Journal Club date.
- Lead the journal club discussion.
- Invite faculty discussants as appropriate.

Seminars

The Health Services Research PhD program holds a research seminar series monthly on the second Wednesday, as well as a Brown Bag seminar sponsored by the Center for Gerontology and Health Care Research and the Center for Evidence Synthesis in Health. The HSR seminar series includes health services researchers from all over New England and the Northeast. Presenters meet with doctoral and post-doctoral students for one hour prior to the seminar.

The Brown Bag seminar is more informal and has several functions ranging from providing a venue in which fellows, students and faculty can present preliminary studies of their research and to expose health services research faculty, students and staff to newly initiated research studies and to discuss policy issues pertinent to health services research, particularly on the topics of Medicare and Medicaid and the chronically ill populations served by these programs. They are hosted by the Center for Gerontology and Healthcare Research and held on the 1st and 3rd Wednesday of every month from 12-1pm.

Doctoral students are encouraged to present at a Brown Bag seminar (at least) once during their time here at Brown. Students may present ideas from their thesis proposal, preliminary results from their thesis or other work, or practice a presentation that they may be making at an upcoming meeting. Brown Bags provide doctoral students and post-docs with the opportunity to interact with faculty that they may not know from the Center and to create new connections between faculty and students. Upon signing up to present, each student will be asked to name a faculty member (other than someone from their thesis committee) that they would like to invite to the Brown Bag to moderate the discussion. Professors Amal Trivedi or Kali Thomas can assist in identifying a faculty member, should a student need assistance. Contact Linda McCormick to sign-up as a presenter.

Teaching Requirements

PhD students are required to develop experience and expertise in teaching. Two semesters of teaching experience are required for current and future doctoral students in the School of Public Health.

The first teaching experience for doctoral students is a full Teaching Assistantship (TA). A TA serves in a course taught by departmental faculty for at least one semester, a maximum of 20 hours per week. The TA is typically undertaken during the second year of the doctoral program. The course assignment

is made by the department, in some cases in consultation with the doctoral student. A TA works under the direct supervision of the faculty member responsible for the course. Typical responsibilities include planning and conducting recitation or lab sessions, grading, holding office hours, and other technical assistance. TAs may be asked to deliver one or two lectures for the course.

The second requirement is a Teaching Experience (TE) with a service expectation of up to 10 hours per week. The TE takes the form of a registered course and confers a tuition unit. The TE is a mentored experience that provides students with more responsibility for pedagogy and leadership in the course. It is typically undertaken during the student's third year. There can be exceptions to this requirement during the third year, such as a personal F31 award or a T32 with stated restrictions on teaching experiences. In addition to the teaching service, students are expected to attend at least two teaching related seminars, offered by the Department, the School, or the Sheridan Center.

Students may elect to participate in other teaching activities during their study at Brown, for example as guest lecturers during the semester in a departmental course. However, these activities cannot be used to fulfill the teaching requirement. Except in rare circumstances, teaching experiences at other universities cannot be used to meet the teaching requirement. Final decisions are made at the discretion of the specific graduate program.

Students with a career interest in teaching may elect to participate in more extensive teaching experiences such as the Brown-Wheaton Teaching Fellowship or The Brown Tougaloo Faculty Fellowship. These fellowships substitute the research assistantship as funding support for advanced doctoral student and allow the student to design and teach their own course as visiting faculty. More information on these programs can be found on the Brown Graduate School's website.

Students whose native language is not English must be evaluated and certified for English proficiency before serving as a Teaching Assistant. English language assessments are done by appointment only at the Center for Language Studies. Students should contact Jill Stewart at the Center for Language Studies early to make an appointment. This office handles the confirmation of English proficiency that is required within the first year of graduate studies and/or by the end of the semester in which the student serves as a TA. If a student's command of spoken English does not meet this proficiency, the student must enroll in the appropriate ESL course(s) recommended.

Sheridan Center Teaching Certificate I Program

The Harriet W. Sheridan Center for Teaching and Learning at Brown University administers the Teaching Certificate Program. PhD students are encouraged to complete the Teaching Certificate I Program. The teaching certificate programs offered by the Sheridan Center are described at the following website: <http://www.brown.edu/about/administration/sheridan-center/sheridan-certificate-programs>

This program is intended to assist graduate students who may have had little or no teaching experience. It addresses the immediate needs of students serving as Teaching Assistants, and focuses on issues they will confront throughout their careers. The program has three basic requirements: (1) participation in the Sheridan Teaching Seminar Lectures and Workshops, including completion of the final Program Evaluation form, (2) participation in a departmental Micro-Teaching Session, and (3) completion of an Individual Teaching Consultation.

Interested students can participate in the extensive program of training and other activities sponsored by the Sheridan Center. This Center's mission and function are described in detail on their webpage: <http://www.brown.edu/about/Administration/Sheridan-Center/>

DOCTORAL DEGREE PROGRAM COMPETENCIES

The doctoral program is intended for highly qualified students who plan to pursue a career focused on research, or research combined with teaching. The Graduate School has several University-wide requirements of all students enrolled in graduate programs at Brown. These guidelines and regulations apply to all students in the School of Public Health Graduate Programs, and both students and advisors are expected to become familiar with these. They can be accessed on-line at: <http://www.brown.edu/gradschool/>

Within the Department, the major requirements for the PhD are:

1. Completion of a program of courses covering core areas of required expertise. All tuition units must be completed before entering candidacy.
2. Demonstration of proficiency in teaching.
3. Synthesis of a core body of knowledge, evaluated via written examination.
4. Demonstration of readiness to undertake original research, via oral presentation and defense of a written dissertation proposal (oral exam).
5. Submission of a dissertation grant to an external funder.
6. Completion and oral defense of a dissertation that makes an original contribution in the chosen field of study.

The curriculum is competency-based because this approach provides clarity of the learning direction, stimulates accountability in the process of learning, and provides a framework regarding evaluation of learning. Although variability in the definition of competencies exists, we define competencies in terms of knowledge, skills, and abilities. The doctoral program in health services research builds upon the methodological foundation of epidemiology and biostatistics, but extends beyond to incorporate social science theory pertinent to health services research.

There are eight core competency areas: 1) theory and context; 2) study design; 3) analysis; 4) policy; 5) data management and practical research skills; 6) effective communication; 7) ethical behavior, administrative skills, and personal and professional development; and 8) project leadership/independent research skills. Within each competency area, specific details regarding desired competencies are used by students and mentors as guidelines that assure that stipulated learning objects have been achieved.

Opportunities for developing the competencies are provided in a variety of ways in the graduate program. At the foundation of the graduate program are core courses. However, other modalities of learning are common including, short courses (3 weeks), structured reading courses, round table discussions, lectures, seminar, research group meetings, workshops, on-line training, student meetings, professional meetings, and research assistantships, among others. These opportunities for learning are

Health Services Research Doctoral Program Handbook

used to reinforce material covered in courses in meeting the student's individual program goals. A brief description of opportunities that may be new to graduate training programs is provided below.

Short courses: A multi-lecture 2-3 week course offered over winter break and during the summer to provide graduate students with skills necessary to access upper level classes, and research assistantships.

Lectures: Several existing, relevant lecture series are offered in the Brown community (e.g., health services research, biostatistics, public health, sociology, economics, etc.).

Faculty forum: *See pages 7-9.*

Journal club: *See pages 7-9.*

Pre- and Post-doctoral student meetings ("POPCORN"): These hour-long meetings are organized by the post-doctoral fellows in the Center for Gerontology and Health Care Research and HSR doctoral students. When these popcorn meetings are held, All PhD students are required to attend. Typical topics include professional development (mentoring, grant applications, job search strategies; defining a research agenda) and important health policy content areas (Affordable Care Act, Medicare/Medicaid, etc.). Popcorn is served.

Research group meetings: There are currently 11 Centers and Institutes through which most faculty in the public health program undertake their research. Most Centers and institutes have regular research meetings. Students are encouraged to work with their advisors to identify an appropriate research group meeting and attend whenever possible.

Workshops: Workshops are intensive courses (one session 3-4 hours) for a small group addressing a specific problem or issue. The expectation for workshops is a high level of attendee participation, interaction, and hands-on exercises.

On-line training: The inclusion of on-line training programs (in particular for statistical programming) available from various University and non-University sources can be incorporated into the graduate training program. Such programs are identified periodically by program faculty and students and made available on an as-needed basis.

Student leadership: Opportunities for student leadership arise in a wide variety of activities, including several of the meetings described above that are student run. To date, students have organized meetings to plan the journal club, provide feedback with respect to the program, and organize social activities. Students have formed a writing group charged with organizing program feedback. In addition to these meetings, the Sheridan Center organizes opportunities for achieving competencies in teaching. An additional opportunity for student leadership arises from representation on several departmental groups including the Curriculum Committee and the Graduate Studies Committee. These are elected positions which are held for one year. The School of Public Health Student Council, Graduate Student Council, the AcademyHealth Chapter and Programming Club offer leadership opportunities for students as well.

Professional meetings: We require that students identify at least one professional society in which to become an active student member. Selection of target society is to be made in consultation with

faculty mentors. A common selection for Health Services Researchers is AcademyHealth, but students may choose any society of relevance to their discipline. Benefits of student membership include: networking, serving as ambassadors for our program, increasing visibility for our program, and having the opportunity to exercise leadership skills. In year 1, students are not expected to present their research, but to learn what is expected by observing and attending a professional meeting. In subsequent years, students are expected to submit abstracts and present their findings.

Internal Grant Review Meeting: The internal grant writing review meetings occur weekly (except for the 2nd Wednesday of the month). These meetings provide students an opportunity to review ideas people have for new proposals, resubmissions, etc. This is an informal session in which the individual presenting receives feedback from the group about their respective submission. Doctoral students may request to be informed of these meetings by contacting Linda McCormick (linda_mccormick@brown.edu).

PHP1001 Provides an introduction to public health concepts and practice by examining the philosophy, history, purpose, organization, functions, tools, activities and population impact of public health.

PROGRAM COURSEWORK AND SAMPLE CURRICULA Regardless of specialty track, the required core courses are provided below. As can be seen, the required courses (in their anticipated sequence) cover the majority of the competencies. Students must request permission to waive a required course. Generally, only required introductory courses can be waived (e.g., PHP2150, PHP2510, PHP2400), and then only when a student can demonstrate that s/he has satisfactorily completed an equivalent course at Brown or at another institution in the past. Students seeking permission should obtain signatures first from their advisor, second from the course instructor, and lastly, from the program director. The course instructor may ask the student to take a past final exam from the course for which a waiver is being requested. Students are expected to substitute an alternative course in place of the waived course. The list of electives below is current at the time the handbook was written. However, the most up to date reference for courses each semester can be found through the Brown course catalog:

<https://courses.brown.edu/>

Year I

Semester I:

PHP 1001 Public Health (Online Course with Patricia Riscia) no waivers offered
PHP2150 Foundations in Epidemiologic Research Methods
PHP2510 Principles of Biostatistics and Data Analysis

Sample of electives offered:

PHP2450 Measuring and Improving the Quality of Health Care
PHP2410E Medicare: A Data Based Policy Examination (may be more appropriate for 2nd year if student has not had prior experience with statistical programming and large databases)
PHP2465 Intro to Health Decision Analysis
Other elective courses approved by advisor

Winter break: SAS or other short course training session

Semester II:

PHP2200 Intermediate Methods in Epidemiologic Research
PHP2511 Applied Regression Analysis
PHP2400 The U.S. Health Care System: Case Studies in Financing, Delivery, Regulation and Public Health

Sample of electives offered:

PHP2060 Qualitative Methods in Health Research
PHP2040 Applied Research Methods
PHP2350 Economics of Medical Therapies: Health Policy and Practice
PHP2430 Analysis of Population Based Data Sets
PHP2030 Clinical Trials Methodology
PHP2436 Conflicting Priorities? Prescription Profits + the Public's Health

Health Services Research Doctoral Program Handbook

PHP2415 Introduction to Evidenced-Based Medicine

Other elective courses approved by advisor

Year 1 milestones to remain in academic good standing:

- Complete Responsible Conduct in Research (ethics) training program
- Appropriate statistical software training (SAS, Stata, etc.)
- Graduate Student Course on SAS Data Management
- Complete written Year 1 comprehensive examinations
- Decide on Specialty Track or develop individualized alternative
- PHP 1001 Public Health (Online Course with Patricia Riscia) *no waivers*

Summer break: Mandatory full-time summer research assistantship; economics and/or other short course training session

Year 2:

PHP 2090 Research Grant Writing for Public Health

PHP 2455A Health Services Research Methods I

PHP 2455B Health Services Research Methods II

Additional courses as required for specialty track or electives needed to complete course requirements

Sample of electives offered:

- PHP 2250 Advanced Quantitative Methods in Epidemiologic Research
- PHP 2365 Public Health Issues in LGBT Populations
- PHP 2385 Local and Global Community Engagement to Reduce Health Disparities
- PHP 2410E Medicare: A Data Based Policy Examination
- PHP 2530 Bayesian Statistical Methods
- PHP 2550 Practical Data Analysis
- PHP 2601 Analysis of Lifetime Data
- PHP 2603 Analysis of Longitudinal Data
- PHP 2604 Statistical Methods for Spatial Data
- PHP 2610 Causal Inference and Missing Data
- PHP 2690 Statistical Foundations of Data Science
- PHP 2980 Graduate Independent Study (e.g. reading course)
- PHP 2445 Minding the Gap: The U.S. Healthcare Safety Net

Year 2 milestones to remain in academic good standing:

- Complete Teaching Assistantship requirement unless TA deferred to 3rd year
- Complete Workshops as deemed appropriate by mentoring team
- Continue taking required specialty track courses
- Complete written Year 2 comprehensive examinations

[The Teaching Certificate I: Sheridan Center - Reflective Teaching is available and encouraged for those interested in additional training in teaching methods](#)

Year 3:

PHP 2980 Thesis Preparation (Override Code from Academic Advisor Needed)

Additional courses as required for specialty track or electives needed to complete course unit requirements. For students who enter the PhD program without a Master's degree, courses to complete the 24 tuition units should be discussed with mentor.

Year 3 milestones to remain in good standing:

Submit external dissertation grant. (Students entering w/master's degree expected in year 3, bachelor's expected submission in 4th year)

Complete oral examination for dissertation proposal.

Complete Teaching Experience requirement (register for PHP2980 under Instructor's section)
(Could be completed in 4th year)

Year 4:

PHP 2980 Thesis Preparation (Override Code from Academic Advisor Needed)

Additional courses as required for specialty track or electives needed to complete course unit requirements.

Concentrated dissertation work.

Present findings at professional meetings.

Additional methods / biostatistics courses, if necessary.

Year 4 milestones to remain in good standing:

Present findings at professional meetings.

Potentially defend dissertation/continued satisfactory dissertation progress.

SPECIALTY TRACKS

As soon as is reasonable in the degree process, students determine which specialty track fits their goals or create their own specialty track in conjunction with their advisor and some students complete the general track. The ultimate goal is for students to develop a specialization. Each of the established tracks are described in greater detail below in an area relevant to health services research. Permission for the plan of study must be obtained from the HSR Director of Graduate Studies. Selection should be made during the second year at the latest, as the second year qualifying exam will be specialty track specific.

At present, two specialty tracks are offered: pharmaceutical health services research and health economics. Students may also design their own track within health services research. For instance, students may design a focus on the application of sociological perspectives and organizational theory in the investigation of outcomes at the individual, organizational, policy levels of analysis or methodological consideration in evidence synthesis and decision science. Students who create their own track are responsible for identifying an approved sequence of courses that will fulfill the relevant content and methodological requirements, as well as an appropriate faculty advisor. Coursework required for specialty tracks, whether existing or self-designed, will be in addition to general program requirements.

Specialty in Pharmaceutical Health Services Research

The most effective medical interventions in modern society include the use of medications. The demand for highly skilled researchers focusing on evaluation of issues related to medication use has increased. Pharmaceutical health services research is of interest to the government, pharmaceutical industry, regulators, and organizations delivering pharmacy care. Areas of research span multiple settings (e.g., population-based, outpatient settings, in-patient settings, nursing homes). Students will become highly skilled in the implementation of pharmacoepidemiologic and other theory-based approaches to examining drug utilization, adverse and beneficial effects of medications, adherence, prescribing trends, pharmaceutical policy, drug pricing, as well as studies of interventions to improve the quality of pharmacy care. Most of this research has involved the use of large, cross-linked, observational datasets.

To complete this track, students must meet with Dr. Theresa Shireman (track advisor) work with their advisor to select 3-6 additional courses as a function of interests, previous coursework and experience. Foundational courses for the track are PHP 2440 Introduction to Pharmacoepidemiology and PHP 2436 *Conflicting Priorities? Prescription Profits & the Public's Health*.

- PHP2440 *Introduction to Pharmacoepidemiology*. Pharmacoepidemiology is the application of the principles of epidemiology to study the use and effects of medications and other medical devices, generally in large populations. Most studies examine the adverse events or therapeutic benefits of drugs or medical devices after products have been launched (post-marketing). Such work is critical to overcome the inherent limitations of pre-marketing studies and for supporting the most appropriate use of medications/devices with respect to safety and effectiveness. This course provides an introduction to the principles of pharmacoepidemiology with applications from the medical literature.
- PHP2436 *Conflicting Priorities? Prescription Profits & the Public's Health*. The United States spends more on pharmaceuticals than any other nation. Our spending reflects both higher use of medications (intensity) and higher prices. At the same time, US pharmaceutical firms are leaders in innovation and drug development. Or are they? The purpose of this course is to provide an introduction to the study of the pharmaceutical (& biopharmaceutical) industry. The framework for this global presentation of the pharmaceutical industry is economic and policy analysis. We will focus upon the suppliers of therapeutic agents and explore their motivation and performance. This course is intended to broaden students' understanding of the health policy process, especially as it relates to pharmaceuticals, and to describe potential applications of organizational theories to pharmaceuticals and biopharmaceuticals. We will discuss demand and supply issues related to bringing products to markets, setting drug prices, and comparing international trends. By focusing on the manufacturers, students will learn more about health policy choices and the trade-offs made in political processes.

For students interested in this track who lack sufficient background, suitable introductory courses will be identified through discussion with the student's academic advisor. Suggested courses may include:

- PHP2030 *Clinical Trials Methodology*. Examines the modern clinical trial as a methodology for evaluating interventions related to treatment, rehabilitation, prevention and diagnosis.

Topics include the history and rationale for clinical trials, ethical issues, study design, protocol development, sample size considerations, quality assurance, statistical analysis, systematic reviews and meta-analysis, and reporting results. Extensively illustrated with examples from various fields of health care research.

Prerequisites: Introductory epidemiology and statistics.

- PHP2350 *Economics of Medical Therapies: Health Policy and Practice*. This course introduces methods and applications of decision analysis, and benefit-cost analysis in public health policy and practice, including health care technology assessment, medical decision making, and health resource allocation. Examines technical features of these methods, problems associated with implementing them, and advantage and pitfalls in their application in setting public health policy.
- PHP2430 *Analysis of Population Based Data Sets*. Epidemiologic research, health services research and social/behavioral science research very often conduct “secondary analysis” of existing population-level datasets. Benefits of using these datasets include their representative sampling frames which allow generalization to larger populations, timeliness, and lower cost. In addition, computer technology also makes it possible to link some databases providing even richer sources of information. There are also several technical and methodological concerns when conducting “secondary analysis”.
Additional methods courses may be taken with permission from the student’s advisor.

Specialty in Health Economics

The specialty track in health economics offers both economic theory as well as additional methodological training, relying upon the econometric tools used by that discipline but applied to better understanding the demand for health services and the industry factors that influence the distribution and shape of health care services in different markets. Of the increasing number of doctoral training programs in health services research, those built around the discipline of econometrics are prevalent. Nonetheless, few of these programs are designed to give students complete exposure to all aspects of economics as a discipline, then allowing students to specialize in health issues.

The goal of the specialty track in health economics is to offer additional training in both the theory and methods of economics in order to prepare students to acquire greater substantive and technical competencies such that they can execute a dissertation that has the potential of contributing to the health services literature from the perspective of a health economist. College-level intermediate Microeconomics is required as a prerequisite; and intermediate Econometrics is highly recommended.

To complete this track, students must meet with Dr. Omar Galarraga (track advisor) work with their advisor and take a minimum of four courses; three must be ECON2320, ECON2360 and PHP2480 (described below). Another may be an elective.

- ECON1360 *Health Economics*. This course introduces students to the issues, theory and practice of health economics in the US. Topics include the economic determinants of health, the market for medical care, the market for health insurance and the role of the government in health care. Course work includes data analyses using the program STATA.

- ECON1460 *Industrial Organization*. A study of industry structure and firm conduct and its economic/antitrust implications. Theoretical and empirical examinations of strategic firm interactions in oligopolistic markets, dominant firm behaviors, and entry deterrence by incumbents. Also, economics of innovation: research and development activities and government patent policies.
- ECON1530 *Health, Hunger and the Household in Developing Countries*. Microeconomic analysis of household behavior in low income societies emphasizing the economic determinants of health and nutrition and the evaluation of policy. The relationship among health, nutrition, fertility, savings, schooling, labor productivity, wage determination, and gender-based inequality. Emphasizes theoretically-based empirical research.
- ECON1629 *Applied Research Methods for Economists*. This class will cover the basics of applied research in economics. We will cover how we use economic theory to formulate a hypothesis to test and how we use data to test our hypothesis. As part of the coursework, students will be exposed to topics across multiple fields of applied economic research (eg, health, labor, political economy, urban economics, development, etc) that can be explored in greater detail in more advanced classes. Students will read and discuss papers published in professional journals and perform data analysis as part of the course requirements.
- ECON2320 *Economics of Labor and Population*. This course examines identification issues in empirical microeconomics. Focus on the sensible application of econometric methods to empirical problems in economics and policy research -- particularly labor and population economics. The course examines issues that arise when analyzing non-experimental data and provides a guide for tools that are useful for applied research. The course also emphasizes how a basic understanding of theory and institutions can help inform the analysis. By the end of the course, students should have a firm grasp of the types of research designs and methods that can lead to convincing analysis and be comfortable working with large-scale data sets.
- ECON2330 *Topics in Labor Economics*. The course introduces students to procedures used to extract evidence from data and to perform rigorous causal inference in order to evaluate public policy on issues such as schooling, the return to education and returns on late intervention programs. Econometric methods, such as Instrumental Variable, Matching, Control Functions, Self-selection Models and Discrete Choice as well as Panel Data Methods, are discussed in detail.
- PHP2350 *Economics of Medical Therapies: Health Policy and Practice*. Introduces methods and applications of decision analysis, cost-effectiveness analysis, and benefit-cost analysis in public health policy and practice, including health care technology assessment, medical decision making, and health resource allocation. Examines technical features of these methods, problems associated with implementing them, and advantages and pitfalls in their application in setting public health policy.
- ECON2360 *Economics of Health and Population*. An introduction to current research in the economics of health and population. Focuses on studies of empirically-tractable and tested models of individual, household, and firm behaviors and how these behaviors interact through

markets and other institutions. Among the subjects considered are the economics of fertility and marriage, the operation of the health services sector, and the implications of population aging.

- PHP2480 *Selected Topics in Global Health Economics*. The course surveys issues, theory and practice of health economics from a global perspective. Discusses application of econometric methods in global health, including propensity score matching, regression discontinuity, field experiments and instrumental variables. Examines current topics in global health economics: conditional economic incentives, social health insurance, public goods, and externalities.

Other courses may be taken as they arise with permission of the student's advisor.

MENTORING

The cornerstone of the health services research doctoral training program is the advising/mentoring program. The mentoring program integrates students into university life, promotes their retention of students, increases mentors' satisfaction, recruitment yield, decreases time to graduation and creates networking opportunities. The National Institutes of Health recognizes that today's research climate calls on methods from different related disciplines. The traditional sole-mentor model that typifies most graduate training programs does not suffice. A team of mentors at varying levels of career, offering complementary expertise is likely to be more effective than the sole-mentor model.

Upon matriculation, students are assigned one faculty academic advisor to begin their mentoring team. The student and academic advisor complete a mentoring expectations contract as well as an Individual Development Plan (IDP) which is updated annually. Although the student is assigned to one faculty advisor, the student is encouraged to discuss research ideas and opportunities with any faculty members.

Individual Development Plan Policy

In response to the National Institutes of Health (NIH) notice [NOT-OD-13-093](#), and the Brown University School of Public Health mandate regarding the use of individual development plans (IDP) for graduate students, effective April 1, 2015, the doctoral program in Health Services Research will require:

- All incoming and continuing HSR doctoral students (regardless of funding source) must submit an updated IDP, in consultation with their advisor, on an annual basis. It is completed and signed due to the Academic Program Coordinator no later than December 15th of each year.

The IDP is a valuable tool that gives students the opportunity to address their short-term and long-term career goals. In order to achieve compliance with the IDP policy, please fill out the [Individual Development Plan for Health Services Research Doctoral Students](#), discuss with your advisor, and submit your signed and completed form to the Academic Program Coordinator.

As students develop their specific research interest, they are encouraged to consider adding an additional research advisor if their research interests are not aligned with their academic advisor. In addition to the faculty advisors, students have access to peer mentors, as well as alumni if requested (through the Director of Graduate Studies). The goal of each advising resource is provided below.

Academic advising/mentoring

The Director of Graduate Studies assigns each incoming student an academic advisor to assist the student in charting an academic course to assure that key benchmarks are met. The advisor is expected to be familiar with the student's academic background, particularly with respect to previous graduate coursework. The academic advisor not only assists in the selection of courses, but also in shaping academic, career and personal goals. Further, the academic advisor assists the student in developing strategies for achieving these goals.

Students should plan to meet with their academic advisor at least once per semester. In the initial meetings with the academic advisor, students should try to plan a curricular program for up to two years and together complete an Individual Development Plan. The plan should include setting target dates for completion of milestones.

The advising relationship is an important one and students should be comfortable with their advisor. Ground-rules and expectations are identified and established via a Mentoring Contract. It is understood that in some cases an individual student may wish to change academic advisors. It is expected that changes will be requested only after the student has acclimated to the Department. This can be done any time by requesting a change from the Graduate Program Director. Note: The selection process and role of the *academic advisor* is different from that of the *dissertation advisor*. As the student's research trajectory becomes clear, the academic advisor is formally replaced by the dissertation advisor. The student selects the dissertation advisor who may be the same as the academic advisor.

Research mentoring

The primary roles of the research mentor are to: 1) immediately integrate students into the research enterprise at Brown University; and 2) identify potential learning experiences beyond the classroom. The research mentor should be familiar with the student's personal statement included in the application for admission. The research mentor may be separate from the academic advisor to increase students' exposure to faculty. Students are NOT required to participate in a research assistantship in the first year, but exposure to ongoing research projects is beneficial to student development. The research mentor connects students to ongoing research meetings and studies on substantive research topics. When assigned to an RAship, students are expected to attend regular meetings to begin observing the research process, networking with researchers interested in their field of inquiry, and hearing what the latest research questions, issues, and funding streams are.

The research mentor helps the student develop a list of "shadowing" experiences. These can include clinicians, hospital quality improvement program staff, sitting in on regulatory board meetings, health insurance companies, observing people coding data used to populate administrative data sources, etc. The purpose of these experiences helps students gain insight into how the various stakeholders in health care view the issues discussed in the academic context and to accumulate experiences that

should help stimulate more useful, practical research questions. These experiences also should help students understand some of the influences on existing data collected for administrative or payment purposes.

Peer mentoring program

The mission of the graduate student peer mentoring program (buddy/big sib) is to provide a supportive environment for health services research graduate students and to link new students with successful role models. This program is designed to provide an opportunity for guidance and a mechanism for students to tap into appropriate resources available on campus. Peer mentors model professional behaviors expected of future scientists including guiding and mentoring people newer to the field.

Development of strong student networks within the program facilitates future professional development. Peer advisers can respond to frequently asked questions that students have. They can also interact with students in a wide variety of settings, and students may feel more comfortable talking to one of their peers than to a professional adviser. Peer advisers have firsthand knowledge of the issues and concerns that students face on a daily basis and have experience dealing with the challenges related to the selection of classes and time management.

Alumni connections program

We have designed a mentoring program that taps into the experiences of graduates of the academic programs in public health by providing ‘distant’ mentoring by alumni. The goal of the alumni connections program is three-fold. First, we are able to take advantage of the potential networking opportunities for our students. Because doctoral trained students can work in a variety of settings (e.g., government, industry, academic), we believe that people working in settings beyond Brown may be more in touch with relevant issues given the context of their work. Second, sometimes students have challenging experiences as they progress through various stages of their training. In these situations, it is often useful to get advice from persons who have successfully survived similar experiences. Lastly, the goal of the program is to keep alumni interested and connected to the happenings on campus.

THE DISSERTATION

Selecting a dissertation chair and dissertation mentoring team

Students enrolled in the PhD program must pass their written examinations prior to selecting a dissertation chair and committee, and progressing to the oral examination. However, we encourage students to learn about the research interests of various faculty members to gather information about prospective advisors well in advance of completion of the written exams. Any member of the graduate faculty in health services research can potentially serve as a doctoral thesis advisor. We recommend the following guidelines when selecting such an advisor:

1. Ask someone who has experience in the area you are interested in studying.
2. Ask someone who is able to make a commitment to be your mentor. Clarify and come to agreement with the dissertation advisor on expectations in terms of time and substance. Students who have established ongoing relationships with their advisors as research and/or teaching

assistants have more opportunity for receiving mentoring from these individuals. Your initial academic advisor should assist you in the process of doctoral advisor selection.

3. Take into account the availability of funding when choosing an advisor. In the majority of cases, funding for doctoral students is arranged by and in conjunction with their doctoral thesis advisor.

Your advisor provides ongoing supervision and consultation for the conceptualization, design, conduct, analysis, and interpretation of the research project. Most advisors engage you in scientific activities beyond your thesis, for example, presenting talks at university seminars and scientific meetings, assisting with manuscript reviews, and collaborating on other research projects.

The minimum size of a doctoral committee is three faculty members. More members may be preferable to have a balance of expertise representing substantive and methodologic aspects of the thesis plan. On the other hand, more than four members may become administratively complicated and challenging for the student who may feel compelled to respond to differing and, at times conflicting, advice.

Students should discuss selection of committee members with their dissertation advisor. Although interactions with committee members vary considerably, the minimal expectation of the committee is to evaluate and provide feedback quarterly intervals during the preparation of the dissertation. Committee meetings should be scheduled on a regular basis (e.g., quarterly) to ensure this. Final composition of the committee must be communicated to the Graduate Program Director and approved before the oral examination of your thesis proposal (see Form 1 - Dissertation Committee Request Form). Once the committee is approved and the Dissertation Committee Request Form is signed by the Graduate Program Director, the student provides the signed form to the Academic Program Coordinator and a copy to the committee chair.

Oral Qualifying Exam (Thesis Proposal)

The oral examination should be completed within a year from the time of the successful 2nd year written examination except for those students who entered with a bachelor's degree who should complete by the 3rd year. The goal of this part of the qualifying examination is to determine how well the student can define important scientific questions and devise creative and innovative approaches to answer them. Prior to the oral exam date request, the student should complete the oral exam date request form (see Form 2 – Oral Exam Date Request Form). The final signed copy is submitted to the Academic Program Coordinator. The oral exam consists of two parts:

Written proposal. The proposal should be delivered to members of the dissertation committee two to three weeks prior to the date of the oral exam.

In general, the written proposal would include the following:

1. Summary of the proposal that includes the specific aims of the work to be done, the significance of the work to the field and the innovative nature of the study.
2. Background and literature review. Describe the previous work done in the field that leads up to the scientific problem you are addressing. Raise questions about or indicate existing gaps in

existing work that your dissertation will address. This step is crucial to establishing that your work will be original and innovative.

3. Preliminary studies. Describe what work you have done, if any, that supports the proposed project.
4. Proposed work. This section is the most important of your proposal and probably should be longer than each of the other three. It should describe the proposed work and give an outline for the three thesis papers. It is expected that the outline and preliminary work for the first and possibly second paper will be more well developed than for the third. Essentially this section needs to answer the questions: What do you plan to do? Why is it important? How do you plan to do it? What are the expected pitfalls and how might you approach them? If successful, where will your work lead in the future?

The written proposal may take the form of a dissertation grant proposal either submitted or planned to be submitted.

Oral Examination. For the oral exam, the student must prepare an oral presentation of the proposed work, using slides as necessary. The oral examination will be attended by the thesis committee. The exam will be chaired by the dissertation advisor. The defense should be about two hours in length including approximately 30-60 minutes of questions. Students should be sure to practice the presentation beforehand so that there is adequate time for questions. Most importantly, students should realize that the committee has read the proposal, and try to focus on the research plan and its importance, rather than reiterating the background material. Feedback from the oral exam can be very helpful for developing the thesis project.

Evaluation. The chair of the oral exam will summarize the discussion and the outcome of the exam in a written memo to the candidate. The written proposal and oral exam will be evaluated for their content, plan, presentation, and defense. The evaluation results are the same as for the written comprehensive exams: full pass, conditional pass and not pass. Those earning full pass and who have successfully completed all pre-candidate requirements are then admitted to PhD candidacy. Those earning conditional pass may either be asked to re-take the oral exam or to address significant deficiencies in the proposal. In this case, the committee must agree that any shortcomings have been adequately addressed before the student is admitted to candidacy. A 'not pass' means the student may be directed to re-take the oral exam altogether, or may be declined candidacy to the PhD degree. The Oral Exam Results Form (see Form 3) must be completed and submitted to the Academic Program Coordinator after the exam is completed.

Upon becoming a PhD candidate, the student must plan at least twice-yearly meetings with the committee to review progress with members. Quarterly meetings are recommended.

Dissertation Defense

Upon completing the proposed research, students schedule a public presentation and defense of their dissertation through the Academic Program Coordinator and following procedures stipulated by The

Graduate School. The following website also provides instructions for preparing and presenting the PhD dissertation: <http://www.brown.edu/academics/gradschool/dissertation-guidelines>
Students should contact the graduate school for clarification of any instructions and to let them know of the preparation to defend.

Agreement by all committee members and the Program Director to schedule the thesis defense is obviously a strong predictor of approval of the doctoral thesis. However, the final approval of the thesis is made after the student's presentation.

At least three to four weeks in advance of the defense, the student must provide the Graduate Program Director the title of the dissertation talk and arrange a date and location for the defense. The student must also contact the graduate school to make an appointment for submission of the complete dissertation. In addition, the graduate school needs to have the following:

1. A copy of the title page, bearing the notation "approval of semi-final version" (typed or handwritten on the title page) and the signature of the advisor.
2. Names of readers and their addresses if they are not at Brown.
3. Date, time and place of the defense.
4. Student mailing address and telephone number.
5. Previous degrees and dates of receipt.
6. Date of preliminary examination (written and oral)

Committee members should receive the penultimate draft of the thesis sufficiently far in advance of the scheduled defense to allow for reading and preparation of questions; two to three weeks is recommended.

At the conclusion of the presentation, the thesis committee will meet in private to make a final determination of the acceptability of the thesis and discuss any changes for the final version.

Submission of completed dissertation to the Graduate School:

The University Graduate School requires all PhD dissertations to be completed toward the end of April for a May graduation. *Students who do not hand in their final thesis on time cannot participate in the University's graduation exercises.* The graduate school has compiled instructions to help graduate students with the preparation and presentation of the dissertation. These instructions are located at the following website:

[Dissertation Guidelines](https://www.brown.edu/academics/gradschool/dissertation-guidelines)

<https://www.brown.edu/academics/gradschool/dissertation-guidelines>

When the thesis is presented to the Graduate School, it must be in final form. It may not be revised in any way after it is presented. In addition to providing the graduate school with the electronic copy of the PhD dissertation and copy the committee members and the Department by submitting to the Academic Program Coordinator.

STUDENT EVALUATION

Student Academic Standing Evaluations

Students' academic standing (good, satisfactory, or warning) is evaluated twice per year, at the end of the fall semester and at the end of the spring semester. Student evaluations are completed with input from all graduate program faculty (teaching faculty, RA or TA supervisors, academic advisors). The purpose is to provide consolidated feedback to students about their performance and progress in the program. If the determination is made that a student is not making satisfactory progress, prospects for future financial support could be adversely affected and/or student enrollment in the program may be terminated.

Overall evaluation of graduate students takes place through a semi-annual review by the graduate faculty. The graduate faculty meet in February and June to assess each graduate student's progress and performance from the previous semester. These are important points of evaluation, because overall assessments and decisions for continued support are made at these meetings. The results of the evaluation are communicated to students in a formal letter from the Graduate Program Director at least once per year, or at any point that the student's progress falls below "good" standing. All students will receive a formal letter at the end of each semester.

Students' advisors will discuss the evaluation in greater detail and will be able to provide additional information. Topics relevant for the evaluation can include (though are not limited to) status in academic courses, performance on the qualifying exams, progress towards the thesis, performance as a teaching assistant and research assistant, priorities for the coming year to facilitate progress towards completing the degree and becoming an independent investigator and current and possible financial support.

The program encourages and expects that students and advisors meet periodically during the academic year to discuss the student's progress. This should occur in the context of course selection and subsequently to review the results of the annual evaluation. Semi-annual meetings are not intended to substitute for regular contact and students are encouraged to take the initiative to schedule appointments with advisors on a recurring basis.

Qualifying exams

Written evaluations appropriately timed throughout the doctoral student's training will occur: June Year 1- written qualifying exams (methods); June – Year 2- written qualifying exams (theory/substantive area); Spring Year 3- oral exam (conducted in conjunction with presentation of thesis proposal) for students who entered with a master's degree, otherwise it is year 4; completion of program – oral dissertation defense. Written exam results are ordinarily communicated to students within two weeks of the exam. These take three forms: *full pass*, *conditional pass*, and *not pass*. Students who earn full pass on all portions of the required written examinations move onto to the next stage (preparing for year 2 exams or beginning the dissertation process (i.e., selecting advisor, preparing thesis proposal, etc.)). Students who earn a conditional pass may also be eligible to enter the next stage but may be required to remedy any stated deficiencies (e.g. through directed self-study). Students who do not pass the written examination on the first attempt

(for either the Year One OR the Year Two exam) have **one** additional opportunity per exam to earn a pass or conditional pass. Those who elect to re-take the exam must do so within one year. Two failures on either the first or second year exam will result in immediate termination from the doctoral program.

Written exam – methodologic competencies

In early June of the first year, students are required to demonstrate methodological competence in fundamental and advanced epidemiological methods and biostatistics as evaluated via the written qualifying exams. Students must complete PHP2120, PHP2200, PHP2510, and PHP2511 before taking the Year 1 written examinations. The reading list for the written exam is comprised of the texts and associated materials required in the aforementioned courses. Students should be prepared to answer questions on any material covered in the required courses.

Written exam – theory/ substantive

By June of the second year, the student is required to pass the written qualifying examination focusing on theory and substantive area of research. Students must complete PHP2400 and appropriate coursework relevant to their area of study prior to taking the written examination. The reading list for the written exam consists of relevant substantive texts from specialty tracks, if appropriate, or the health services research literature. Students should be prepared to answer questions on any material covered in the required courses and/or from the reading list. This exam is a take home exam. The students have no more than one week to complete the exam.

Research Ethics Training in the School of Public Health:

All first-year doctoral students in the School of Public Health are required to successfully complete “Responsible Conduct in Research Training.” This five-week introduction to the scope and complexity of ethical situations that confront modern public health practitioners is led by the School's Associate Dean for Academic Affairs (Don Operario). Training covers multiple topics including: the context and history of ethical research practices within public health; research misconduct; the peer review process and its purpose; publication practices and responsible authorship; practical and ethical issues in human-subjects research; data acquisition, storage, and privacy; use of electronic resources; recognizing and navigating conflicts of interest; the mentoring relationship and associated responsibilities of mentors and trainees; and societal impact of public health research. Discussion of the ethics of diversity is incorporated to convey an appreciation for the fact that differences of race, culture, age, gender, disability, and religion can affect the conduct and interpretation of research. The training includes presentations, short illustrative films specific to public health research issues, and small group discussion of hypothetical and real scenarios drawn from current literature and the news media. Supplemental materials and homework assignments are provided through the Collaborative Institutional Review Board Training Initiative (CITI) program online system. School of Public

Health faculty and University staff from the Office of Vice President for Research and Research Administration participate as presenters and discussants along with students. Successful completion of this course includes attendance at all meetings and passing the written final examination. Additionally, all students may continue their training after the first year by attending relevant lectures and discussion sessions sponsored by the Office of the Vice President for Research (<http://www.brown.edu/research/brown-bag-rcr-conversations-graduate-students-and-postdoctoral-researchers>).

The teaching certificate programs offered by the Sheridan Center are described [here](#). This Center's mission and function are described in detail on their [webpage](#).

ACADEMIC POLICIES, PROCEDURES AND FINANCIAL SUPPORT

Grades and Course Credit

Students are expected to achieve grades of A or B in all courses that count for credit towards the graduate degree. Although students could earn credit for grades of C, a C grade may have an adverse impact on the student's overall evaluation and academic standing.

Transfer Credits

PhD students may be allowed credit for graduate work done while in graduate residence at another institution. This includes work taken as part of a Master's degree prior to entering the PhD program. No more than eight of the required 24 units can be credited in this manner.

To receive transfer credit, students must complete the appropriate application, available from the [Office of the Registrar's website](#) (see "Forms" / "Application for Graduate Transfer Credit").

Financial Information for PhD Students

All PhD students will be financially supported for five years by the Department and University. Financial support is contingent upon satisfactory academic progress. The standard financial support package includes tuition, the health services fee, health insurance, and a monthly stipend. Supplemental support may also be available from Brown, Federal Direct Student Loans and other loans. Visit the Brown Graduate School [support](#) website for additional information.

Support packages are granted on a yearly basis.

Awards of financial support for new students are made in conjunction with admission to the program. Awards for continuing students are determined in early spring preceding the academic year for which the award applies (e.g. Spring 2017 for awards that apply to academic year 2017-18).

Students receiving financial support must be registered as full time students, which corresponds to taking four tuition units per semester during periods of financial support. Prior to candidacy, if support is in the form of a full-time *teaching assistantship* or *research assistantship*, students register

for three regular courses and receive four tuition credits. Once students have advanced to candidacy, they must register for PHP 2980 (Thesis Preparation), which will correspond to full-time student status.

The Department has several financial support arrangements through which standard financial support packages are provided, each of which carry different responsibilities and requirements.

Division fellowships are generally awarded to new students for one or more of their first three semesters and a summer. Fellows are permitted to take up to four courses per semester and generally have no teaching or research duties, but will be assigned to work closely with a faculty research mentor.

Teaching assistantships are awarded both to new and continuing students. Each PhD student will need to fulfill the TA requirement for at least one semester. TAsip responsibilities are described above (see “Teaching Requirements). TAsips typically require up to 20 hours of work per week on average.

Traineeships are awarded to students who are pursuing graduate work related to a specific field of study and for which there is a federally- or otherwise funded training program. These carry a specific set of guidelines, restrictions and requirements. Students who are awarded a traineeship must check with the faculty member responsible for administering the grant to learn the details. The department currently holds two training grants to support graduate students interested in aging and health services research.

Research assistants work with faculty members on projects supported by the faculty investigators' grants or contracts. The Graduate Program Director assists students in finding faculty with similar research interests. Research assistantships require, on average, up to 20 hours of work per week during the school year. See the guidelines below for specifics on research assistantships.

External fellowships. The terms of support for external fellowships vary widely and are determined on an individual basis. All students are expected to submit a grant for external funding (e.g. dissertation grants, NSF fellowships, etc.), though ongoing participation and funding in the program is not contingent on successfully securing external funding. The most popular funding mechanism is the Agency for Healthcare Research and Quality (AHRQ) R36 dissertation grant ([see description here](#)), although several students have also been supported by grants from private foundations, including Tarlov and Ware (<http://www.hal-health.org/#!awards/c21ma>) and the JKTG Foundation (<http://jktgfoundation.org/Funding-Support.aspx>).

Staff at the Center for Gerontology and Health Care Research maintain a list of external fellowships obtained by previous HSR doctoral students and can provide information and guidance on fellowship applications. Additionally, the Office of the Vice President for Research maintains a list of links and information about funding opportunities: <http://www.brown.edu/research/funding-opportunities-awards-management/funding-opportunities/external/external-funding-opportunities>

Research Assistantships

Students participate in RAships in a variety of on and off campus settings, including Public Health Research Centers, the Rhode Island Department of Health, the Veteran's Administration (VA) and clinical departments at Brown-affiliated hospitals. This section of the handbook is meant to provide a set of uniform guidelines that apply to RAs in all settings.

Purpose of the research assistantship:

An RA should be an integral part of the student's training program. It provides a means of financial support, experience with academic research in a field relevant to the student, and provides faculty investigators with support in the form of graduate student participation on their projects.

Role of the RA advisor:

The RA advisor is responsible for supervising and directing the student's work during the term of the appointment. Frequently, the faculty member providing the financial support for the RA position will serve as the advisor, but another faculty member can be designated (note: the advisor must be a faculty member). The RA advisor is responsible for coordinating, scheduling, and keeping appropriate documentation on the RA's activity; this is a particularly important function on large projects where the RA may be working with several different faculty and staff members. The advisor also will be solicited for formal feedback as part of the twice-yearly evaluation of students.

Role of the student:

The student is responsible for working on the assigned project for a maximum of 20 hours per week per Brown University Graduate School policy. It is understood that this may sometimes fluctuate during different points in the year, such as when project demands are higher or when students are in an exam period. The advisor and student must work together to ensure that both academic and RA responsibilities are being met.

Duration of the appointment:

RAships typically last a minimum of 10 months and a maximum of 12 months, and are subject to renewal. As described below, students are provided, on average, four weeks of paid vacation during the calendar year – two weeks during the summer and two weeks during the winter break. In addition, students are not expected to work during any of the official Brown staff holidays.

Publications and academic freedoms:

Although the RA's role in generating manuscripts for publication may vary by individual setting, it must be recognized that, consistent with academic norms, those who contribute intellectual content must be given appropriate credit. Being an RA as opposed to being an investigator is not grounds to preclude authorship. RAs who contribute meaningfully to a research project should be offered the opportunity to participate as a coauthor in publications, even if the RAship has been completed at the time the manuscript is being prepared. RAs should notify and work with the RA advisor directly should they wish to initiate preparation of a manuscript for publication based on a project or data associated with the RAship.

Special consideration for students engaged in dissertation work:

Students engaged in PhD thesis research should, when possible, be matched to an RAship that is closely related to their field of research, to the point that some of their work as an RA may eventually result in a first-author published manuscript.

Awarding of industry-sponsored RAships and internships:

Industry-sponsored RAships will be classified by the department as ‘Sponsored Fellowships’ and will be awarded to students based on mutual agreement by the student, the sponsoring organization, and the Graduate Program Director. The industry sponsor should submit a description of the Sponsored Fellowship to the Graduate Program Director for review and approval before it is made available as a means of support.

The process of awarding Sponsored Fellowships follows the guidelines, including timeline, publications, and terms of appointment as the awarding of other RAships. Sponsors of off campus RAs should factor travel time into the student’s overall time commitment, and be prepared to defray appropriate travel expenses.

Specific guidelines for off campus RAships:

RAs must be directly supervised by a full-time Brown faculty member. When the supervisor is not a member of the Department, a faculty liaison, a Department faculty member, will be assigned to oversee the RAship broadly. In many cases this liaison can be the student’s academic advisor.

Policy on Vacation Time for Supported Students (effective September 1, 2009)

The department views summer RAships and fellowships as an extension of program-supported training activities that take place during the academic year. In both the academic year and summer, students enrolled in PhD programs are provided a full-time stipend with the expectation that they will be engaged on a full-time basis in educational and training activities that are relevant to the student’s personal, professional and educational objectives.

Over the course of the calendar year, vacation policy for students supported on a **Research Assistantship or Training Grant** is similar to that for University staff. Specifically:

- University holidays for staff employees (e.g. Memorial Day, Independence Day) will be observed
- Recess periods on the academic calendar (e.g. spring recess, winter recess) are not observed as holiday periods for RA or Trainee duties.
- RA’s and Trainees will have four weeks of vacation in addition to the annual one-week University closure that typically occurs in late December / early January. Students should arrange the timing of their vacation with their RA supervisor. For example, students may elect to take two weeks during the academic year and two weeks in summer.

RA supervisors are expected to make reasonable allowances for personal days and for workload during exam periods.

Arrangements for vacation and personal time should be handled between the RA supervisor and the student; however conflicts or concerns should be communicated to the Graduate Program Director for resolution.

Students supported by a Teaching Assistantship or Fellowship are expected to be available to work with their faculty mentor or other designated faculty supervisor during Academic Recess periods. In short, the same four-week rule applies for TA's and Fellowship students.

Policy on Work During the Summer

Sources of support: During the summer, students are supported either on a divisional fellowship, training grant or RAship. Each source of support provides a comparable stipend. In most cases, students on divisional fellowships and training grants are matched to a faculty member for the summer, providing an opportunity to work individually with the faculty on a specific research project, thereby gaining additional exposure and experience. RAships are paid for by specific grants held by faculty members; work on an RAship generally is geared toward the research program corresponding to the objectives of the grant and also provides students with important skill-building experience. The assignment process is coordinated by the Graduate Program Director of each doctoral program.

Objectives:

For all students, there is an expectation that a minimum of 20 hours per week will be spent on a specific research project that corresponds to the supporting training source. The balance of the full time activities may include additional time spent on the primary research project or related training activities, such as preparing for comprehensive exams, participating in summer classes/tutorials, individual reading and/or class preparation. The student, academic advisor and summer research supervisor should work jointly to formulate a schedule and set of activities designed to meet this comprehensive set of educational objectives. Oversight and advice can be provided by Graduate Program Director as needed.

Work requirement and schedule: The period of work for summer research appointments is June 1 through August 31. During this period of time it is expected that student's schedule of activities, averaged over the summer, will correspond to five full days per week. During the summer, this corresponds to approximately 35 hours/week, though it should be understood that the nature of academic research is such that time demands will almost certainly fluctuate from week to week. A schedule that allows a student to work five full days per week should be agreed upon in advance by the faculty member and the student.

Support for Student Parents

The University, School and Department are committed to supporting students throughout their academic careers, including when students become parents, or if students enter the program as parents. This support takes several forms, as outlined below.

Parental leave of up to eight weeks is available, as described in Brown University's "Childbirth Accommodation Policy." Male or female students acting as the primary caregiver for a newborn baby are eligible. The duration of leave may be beyond eight weeks, depending on how students are funded. Students who anticipate requesting parental leave should consult with their advisor. More information

can be found at <http://www.brown.edu/academics/gradschool/graduate-school-handbook-information-all-graduate-students#childbirth>

The School of Public Health has a dedicated *lactation room* for nursing mothers at 121 S Main Street Room 243B. Other rooms may also be available to meet the needs of nursing mothers in the 121 S Main building, or elsewhere on campus. The Academic Program Coordinator has information about lactation rooms.

Brown University also has a *childcare subsidy* which can help defray childcare costs. Applications are made yearly. Further information, including eligibility and application details, can be found at <https://www.brown.edu/about/administration/human-resources/benefits/child-care-and-backup-care/child-care-subsidy>

The University also provides a number of web-based resources for student parents or students planning to become parents. See <http://www.brown.edu/academics/gradschool/living-resources/family-resources> for further details

Facilities/Space

The Department makes every effort to ensure that all graduate students are provided with adequate office space. The Department provides incoming students with office space that has a shared phone line and an individual desk and laptop computer. Advanced students will ideally be located near their projects, but will be accommodated as necessary. Students who have placements off campus, but who request additional space at 121 S. Main St, will be able to use a common office or will be accommodated as space allows.

Laptop Computers

The Program will provide each incoming doctoral student his/her own laptop computer. While the program will fund the initial laptop purchase, each student will be responsible for any needed repairs, replacement parts, upgrades, etc. As different components of the laptop are subject to different warranty periods, students should always check with the IT System Administrator (Michael Gallino) for any possible component warranty before making a purchase or requesting repair. Students must return the computer to the Academic Program Coordinator upon leaving the program.

Student Membership on Departmental Committees

The Department mandates student representation on the Curriculum Committee and the Graduate Studies Committee. The student seat on the Curriculum Committee rotates between PhD programs. Student representatives from each program participate in the Graduate Studies Committee. Students are also encouraged to participate in University and/or Division level committees such as the University Graduate Council and the School of Public Health Graduate Student Council.

Grievances

Students may not agree with faculty or committee actions related to evaluation of academic progress and standing. This may occur at the point of semi-annual evaluations, or at any of the points in achieving doctoral candidacy and preparing the thesis. Our intent as a faculty is to address disagreements directly and constructively. Therefore, we encourage students initially to discuss their concerns and explore possible solutions with their advisor, the Department Chair, and/or the Graduate Program Director.

The University's faculty handbook has a detailed description of grievance procedures, and students are referred to that document: <http://www.brown.edu/academics/gradschool/grievance-procedures-document>.

Procedures exist for the resolution of non-academic grievances, such as complaints of harassment involving sexually or racially offensive behavior, and discrimination as cited in the University's Non-Discrimination Policy. There are also established procedures for reviewing the cases of students whose actions may require disciplinary measures. Inquiries about these procedures should be directed to the Department Chair and/or the Dean of the Graduate School.

Title IX

"No person in the United States, shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." Title IX of the Education Amendments of 1972, and its implementing regulation at 34 C.F.R. Part 106 (Title IX). HSR is committed to providing an environment free from all forms of harassment. Please see Brown's [Title IX and Gender Equity](#) website for more details.

Language and Writing Assistance

One of the Program's priorities is that graduate students become competent in written and oral communication of scientific thinking. To this end, we offer multiple strategies for support and development of these skills in the graduate program through formal coursework, participation in seminars and journal club, and in teaching and research assistantships. We also encourage students to take full advantage of resources provided by the following organizations on campus.

Center for Language Studies:

Students whose native language is not English can make use of the opportunities provided at Brown to improve their command of spoken and written English. An important resource is the [Center for Language Studies](#), located at 195 Angell Street (<http://www.brown.edu/Departments/CLS/>, tel. 401-863-2546). The Center for Language Studies administers the English for International Teaching Assistants Program, designed for graduate students who will be teaching undergraduates and who need help to improve their English. CLS also coordinates the Foreign Language Placement tests each semester, administers the Language Partners Program and cooperates closely with the Language Resource Center in the Watson Center for Information Technology. Certification by the Center is a prerequisite for students on a Teaching Assistantship.

Brown Writing Center:

All students are encouraged to make full use of the [Brown Writing Center](http://www.brown.edu/academics/college/support/writing-center/):
<http://www.brown.edu/academics/college/support/writing-center/>

The Writing Center is a free academic support service for all members of the Brown Community. The Center is staffed by graduate students from various academic disciplines. Staff members are experienced writers and teachers who participate in ongoing training in composition and Writing Center theory and practice. In addition to holding one-on-one conferences, Writing Center Associates offer various workshops on writing for interested groups.

Students can receive individual consultations with Writing Center Associates. Experienced as well as inexperienced writers are encouraged to come to the Center with their writing concerns. The Writing Center Associates are prepared to discuss all stages of the writing process, from finding a topic up through revision and editing strategies. Associates can help writers deal with writer's block, audience awareness, argumentation, organization, grammar, research skills, the conventions of academic writing, English as a Foreign Language, and issues of clarity and style. Consultation hours are Sunday 3pm-9pm, Monday-Thursday 12 noon-9pm and Friday 12 noon-3pm. Appointments are required and should be made at least three days in advance, or seven days in advance during exam periods. All consultations are held at the Center, 213 J Walter Wilson.

Appointments can be made online through the [Center's webpage](#):

Diversity and Inclusion:

The Department of Health Services, Policy and Practice and the Graduate Program in Health Services Research work together to create and maintain an environment stimulated, encouraged and nourished by the exchange of ideas from individuals with a wide variety of diverse backgrounds. We believe that it is our responsibility to ensure a richly diverse cultural environment that enhances learning and collaborative opportunities. We recognize and appreciate the valuable benefits of this exchange to our immediate and surrounding communities. We are committed to this important vision of our future; a commitment that relies on all of us to ensure its success. Please read the [Department's Diversity and Inclusion statement](#).

In 2017, The School of Public Health created a position devoted to diversity and inclusion. In May, Dr. Caroline Kuo was appointed as the inaugural Associate Dean of Diversity and Inclusion. Visit [the SPH Diversity and Inclusion](#) website to learn about the variety of opportunities and the resources available to you and how you can become involved.

Brown University's strategic plan emphasizes this value and you can read more about it at [the Office of Institutional Diversity and Inclusion \(OIDI\)](#).