

2026–27

Bulletin

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About This Bulletin

The degree requirements and policies listed in the *2026-27 Bulletin* apply to students entering Washington University during the 2026-27 academic year. For more information, please visit the Catalog Editions (p. 7) page.

Every effort is made to ensure that the information, applicable key policies, and other materials presented in the *Bulletin* are accurate and correct as of the date of publication (July 1, 2026). To view a list of changes that have taken place after that date, visit the Program & Policy Updates page. Please note that the *Bulletin* highlights key university policies applicable to its students. Not all applicable university and departmental policies are included here.

Washington University reserves the right to make changes at any time without prior notice to the *Bulletin* and to university policies. Therefore, the electronic version of the *Bulletin* as published online is considered the official, governing document, and it may change from time to time without notice.

The next edition of the *Bulletin* will be published on July 1, 2027. Midyear changes to current courses (titles, descriptions, and credit units) are not reflected in this *Bulletin*. For more information about determining the appropriate edition of the *Bulletin* to consult, please visit the Catalog Editions page (p. 7) in the About This Bulletin section (p. 3).

For the most current information about registration, visit the Plan for Next Semester Overview page of the Workday@WashU website. To view current semester course listings, consult the Class Schedule Search on the Office of the University Registrar website.

Degree progress is monitored in Workday based on program requirements as published in the *Bulletin* in the year of the student's matriculation. Students are responsible for reviewing their academic progress for accuracy and remaining credential requirements. Questions about degree requirements and course applicability should be directed to advisors.

Please email the Bulletin editor (bulletin@wustl.edu), Jennifer Etling Gann, with any questions concerning the *Bulletin*.

Bulletin Policies

Policies related to this catalog include the following:

Changes to the Bulletin

Every effort is made to ensure that the information, policies and other materials presented in the *Bulletin* are accurate and correct as of the date of publication. For more information about the content review process for the Bulletin, please visit the Catalog Editions page (p. 7).

The *Bulletin* for the upcoming academic year is published annually on July 1, and certain post-publication changes may be made until October 1. To view a list of changes that have taken place after the July 1 publication date, please visit the Program & Policy Updates page.

Washington University reserves the right to make changes at any time without prior notice. Therefore, the electronic version of the *Bulletin* and the policies set forth therein may change from time to time without notice. The governing document at any given time is the then-current version of the *Bulletin*, as published online, and then-currently applicable policies and information are those contained in that *Bulletin*.

Discontinued Programs

Students enrolled in programs that discontinue admitting new students during their tenure are expected to meet degree requirements published in the *Bulletin* and in place during their year of matriculation. If a program's requirements change, a student may request to change to a subsequent version effective during their enrollment, which is subject to approval by their school. Students who leave the university may not be allowed to return to a discontinued program depending on the time frame the university has established that the program will teach out remaining students.

Students are held to other policies in effect and as published for the current academic year.

For more information, please visit the Prior Bulletins page (p. 8).

Year of Matriculation

Students are expected to meet degree requirements published in the *Bulletin* and in place during their year of matriculation. If a program's requirements change, a student may request to change to a subsequent version effective during their enrollment, which is subject to approval by their school.

For more information, please visit the Catalog Editions page (p. 7).

Course Numbering

Washington University adopted a new course labeling structure in Fall 2025. The first part is the subject code indicating the area of study: for example, ANTHRO for Anthropology or MEMS for Mechanical Engineering and Materials Science. The second part is a four-digit course number. Course numbers demonstrate a progression of difficulty and/or depth in coursework.

- 1000 to 1999 indicates an introductory undergraduate course, usually without prerequisites.
- 2000 to 2999 indicates an introductory or intermediate undergraduate course, sometimes with prerequisites.

- 3000 to 3999 indicates an upper-level undergraduate course, often with a prerequisite of a prior course or class standing (e.g., junior standing).
- 4000 to 4999 indicates an undergraduate course or seminar with advanced content, in which a graduate student may be eligible to register.
- 5000 to 9999 indicates a graduate course, in which advanced undergraduates may request to register.

The presence of a course in this *Bulletin* signifies that it is part of the curriculum currently offered and may be scheduled for registration.

Curriculum Designators

The subject codes shown below are used in Washington University's course records and are listed here alphabetically.

A

Code	Name
AAS	Asian American Studies
ACCT	Accounting
AFAS	African & African American Studies
AHBR	Applied Health Behavior Research
AMCS	American Culture Studies
ANESTH	Anesthesiology
ANTHRO	Anthropology
APL	Applied Linguistics
ARAB	Arabic
ARC	Archaeology
ARCH	Architecture
ART	Art
ARTARCH	Art History & Archaeology
ASGS	Arts & Sciences Graduate Studies

B

Code	Name
BBS	Biology & Biomedical Sciences
BDSAI	Biomedical Data Science and AI
BEYOND	Beyond Boundaries
BIOCHEM	Biochemistry & Molecular Biophysics
BIOL	Biology & Biomedical Sciences
BME	Biomedical Engineering
BMI	Biomedical Informatics
BSDC	Brown School Doctoral

C

Code	Name
CAPS-AFAS	CAPS - African & African American Studies
CAPS-AMCS	CAPS - American Culture Studies
CAPS-ANTHRO	CAPS - Anthropology
CAPS-ARAB	CAPS - Arabic
CAPS-ART	CAPS - Art
CAPS-ARTARCH	CAPS - Art History & Archaeology
CAPS-BIO	CAPS - Biology
CAPS-BUS	CAPS - Business
CAPS-CHEM	CAPS - Chemistry
CAPS-CHINESE	CAPS - Chinese
CAPS-CIM	CAPS - Computers & Information Management
CAPS-CLASSICS	CAPS - Classics
CAPS-COMM	CAPS - Communications
CAPS-COMPLIT	CAPS - Comparative Literature
CAPS-CRM	CAPS - Clinical Research Management
CAPS-CS	CAPS - Computer Science
CAPS-DANCE	CAPS - Dance & Somatic Movement Studies
CAPS-DATASTUDIES	CAPS - Data Studies
CAPS-DRAMA	CAPS - Drama
CAPS-EASIA	CAPS - East Asian Studies
CAPS-ECOMP	CAPS - English Composition
CAPS-ECON	CAPS - Economics
CAPS-EDUC	CAPS - Education
CAPS-ELIT	CAPS - English & American Literature
CAPS-ELP	CAPS - English Language Programs
CAPS-EPSC	CAPS - Earth & Planetary Sciences
CAPS-FILM	CAPS - Film & Media Studies
CAPS-FR	CAPS - French
CAPS-GERMAN	CAPS - Germanic Languages & Literatures
CAPS-GIS	CAPS - Geographic Information Systems
CAPS-GS	CAPS - General Studies
CAPS-HCARE	CAPS - Health Care
CAPS-HEBR	CAPS - Hebrew
CAPS-HINDI	CAPS - Hindi
CAPS-HIST	CAPS - History
CAPS-HRM	CAPS - Human Resources Management
CAPS-IA	CAPS - International Affairs



CAPS-IRISH	CAPS - Irish Studies
CAPS-IS	CAPS - International Studies
CAPS-ISLA	CAPS - Integrated Studies in Liberal Arts
CAPS-ITAL	CAPS - Italian
CAPS-JAPAN	CAPS - Japanese
CAPS-JME	CAPS - Jewish, Islamic, & Middle East Studies
CAPS-JRN	CAPS - Journalism
CAPS-KOREAN	CAPS - Korean
CAPS-LAS	CAPS - Latin American Studies
CAPS-LING	CAPS - Linguistics
CAPS-MATH	CAPS - Mathematics & Statistics
CAPS-MUS	CAPS - Music
CAPS-NPM	CAPS - Nonprofit Management
CAPS-PHIL	CAPS - Philosophy
CAPS-PHYS	CAPS - Physics
CAPS-POLSCI	CAPS - Political Science
CAPS-PORT	CAPS - Portuguese
CAPS-PSYCH	CAPS - Psychological & Brain Science (Psychology)
CAPS-RELST	CAPS - Religious Studies
CAPS-RUSS	CAPS - Russian
CAPS-SCAN	CAPS - Scandinavian
CAPS-SCI	CAPS - Science
CAPS-SOC	CAPS - Sociology
CAPS-SPAN	CAPS - Spanish
CAPS-SPCH	CAPS - Speech
CAPS-SUST	CAPS - Sustainability
CAPS-WGSS	CAPS - Women, Gender, & Sexuality Studies
CFH	Center for the Humanities
CHEM	Chemistry
CHINA	Chinese
CHST	Children's Studies
CLASSICS	Classics
CLNV	Clinical Investigation
CNST	Construction Management
COMPLITHT	Comparative Literature & Thought
CSE	Computer Science & Engineering
CWP	College Writing Program
CYBER	Cybersecurity Management

D

Code	Name
DANCE	Dance
DAT	Data Analytics
DCDS	Division of Computational & Data Sciences
DESIGN	Design
DRAMA	Drama

E

Code	Name
EALC	East Asian Languages & Cultures
ECON	Economics
EDUC	Education
EECE	Energy, Environmental, & Chemical Engineering
EEPS	Earth, Environmental, & Planetary Sciences
EGS	Engineering Graduate Studies
ELIT	English Literature
EMED	Emergency Medicine
EMGT	Engineering Management
ENGR	General Engineering
ENST	Environmental Studies
ESE	Electrical & Systems Engineering
ETEM	Engineering Management

F

Code	Name
FASHION	Fashion Design
FILM	Film & Media Studies
FIN	Finance
FRENCH	French

G

Code	Name
GENETICS	Genetics
GENST	General Studies
GERMAN	Germanic Languages & Literatures
GLOBAL	Global Studies
GNCOUN	Genetic Counseling
GREEK	Greek

H

Code	Name
HBRW	Hebrew
HCO	Health Care Operations
HINDI	Hindi
HISTORY	History



I

Code	Name
IMSE	Institute of Materials Science & Engineering
INFO	Information Management
INTERD	Interdisciplinary Studies
INTL	International Studies
IPMS	Movement Science
ITAL	Italian

J

Code	Name
JAPAN	Japanese
JCE	Joint Civil Engineering
JCHE	Joint Chemical Engineering
JCS	Joint Intro to Computing
JEC	Joint Engineering Communications
JEE	Joint Electrical Engineer
JEMT	Joint Engineering Math
JIMES	Jewish, Islamic, & Middle East Studies
JME	Joint Mechanical Engineering

K

Code	Name
KOREA	Korean

L

Code	Name
LANDARCH	Landscape Architecture
LATAM	Latin American Studies
LATIN	Latin
LAW	Law
LAWO	Law Online
LING	Linguistics
LWST	Legal Studies

M

Code	Name
MAIR	Military Aerospace Science
MARM	Military Science
MATH	Mathematics & Statistics
MBIO	Molecular Biology
MBIOPHARM	Molecular Biology & Pharmacology
MEC	Managerial Economics

MEDH	Medical Humanities
MEDICINE	Internal Medicine
MEDINTER	Medicine Interdisciplinary
MEDPHASE1	Medicine Phase 1
MEDPHASE2	Medicine Phase 2
MEDPHASE3	Medicine Phase 3
MEDPHYS	Medical Physics
MEDRSRCH	Medicine Research
MEMS	Mechanical Engineering & Materials Science
MGS	Medicine Graduate Studies
MGT	Management
MKT	Marketing
MSB	Biostatistics & Genetic Epidemiology
MUSIC	Music

N

Code	Name
NEUROL	Neurology
NEUROSCI	Neuroscience
NEUROSUR	Neurological Surgery
NRSSCI	Nursing Science

O

Code	Name
OB	Organizational Behavior
OBGYN	Obstetrics & Gynecology
OPHTH	Ophthalmology & Visual Sciences
ORTHO	Orthopedic Surgery
OSP	Overseas Programs
OT	Occupational Therapy
OTO	Otolaryngology

P

Code	Name
PACS	Audiology & Communication Sciences
PATH	Pathology
PBPMSTUDY	Biological & Physical Sciences for PBPM
PE	Physical Education
PEDS	Pediatrics
PHCC	Public Health Concentration Courses
PHDC	Public Health Doctoral
PHEL	Public Health Electives
PHFN	Public Health Foundation
PHIL	Philosophy
PHPC	Public Health Practicum



PHRS	Public Health Research
PHS	Population Health Sciences
PHSL	Public Health Skill Lab
PHTPS	Public Health Transdisciplinary Problem Solving
PHYSICS	Physics
PHYSTHER	Physical Therapy Program - Grad
PNP	Philosophy-Neuroscience-Psychology
POLSCI	Political Science
PORTUG	Portuguese
PRJM	Project Management
PSY	Psychiatry
PSYCH	Psychological & Brain Sciences
PUBHLTHSOC	Public Health & Society

R

Code	Name
RADIOL	Radiology
RADONC	Radiation Oncology
RELPOL	Religion & Politics
REPRSCI	Reproductive Science
RESEARCH	Research
REST	Religious Studies
RUSS	Russian

S

Code	Name
SCOT	Supply Chain, Operations, & Technology
SDS	Statistics & Data Science
SLU	Saint Louis University
SOC	Sociology
SPAN	Spanish
SPCN	Social Policy Concentration
SPFN	Social Policy Foundation
SPGN	Social Policy General
SPHR	Speech & Hearing
SURGERY	Surgery
SWCP	Social Work Concentration Practicum
SWDT	Social Work Doctoral
SWEL	Social Work Electives
SWEV	Social Work Evaluation
SWFN	Social Work Foundation
SWHS	Social Work History & Professional Theme
SWLM	Social Work Leadership & Management

SWPM	Social Work Practice Methods
SWSL	Social Work Skill Lab
SWSP	Social Policy
SWTH	Social Work Theory

T

Code	Name
TIPM	Industrial Management

U

Code	Name
UMSL	University of Missouri-St. Louis
URBDES	Urban Design
URST	Urban Studies

W

Code	Name
WGSS	Women, Gender, & Sexuality Studies
WRITING	Writing

Catalog Editions

The courses and policies listed in this *Bulletin* are subject to change at any time through normal approval channels within Washington University. New courses, changes to existing coursework, and new policies are initiated by the appropriate institutional departments, committees, or administrators. Academic policy revisions are generally implemented in the next academic year following notification thereof. Washington University publishes a new edition of the *Bulletin* each July, and its contents apply to the subsequent fall, spring, and summer terms. Occasionally a policy or requirement must be changed and implemented during the same academic year (e.g., in the case of relevant external requirements, such as state regulations). All changes must be approved by college or school personnel who oversee academic curriculum and policies.

Washington University students are expected to meet degree requirements published in the *Bulletin* and in place during their year of matriculation. Undergraduates who initially enroll in a summer term to pursue a special program follow requirements for the subsequent fall term. Students will need to check their school's processes to potentially change applicable catalog years or alter their degree requirements.

Students should review specific Washington University and individual school policies related to transfer credit, changing programs, leaves of absence, and military service.

Prior Bulletins

To find program details, course descriptions, and relevant policies, choose the year of enrollment below to find the available *Bulletins*. If the required year is not shown or the school's *Bulletin* is not available, please email the Office of the University Registrar (registrar@wustl.edu) with specifics of what information is needed.

2025-2026

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Business Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)
- Public Health Bulletin (HTML) (PDF)
- Social Work & Social Policy Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- School of Continuing & Professional Studies Bulletin (HTML: Undergraduate, Graduate) (PDF)

2024-2025

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Business Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)
- Social Work & Public Health Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- School of Continuing & Professional Studies Bulletin (HTML: Undergraduate, Graduate) (PDF)

2023-2024

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Business Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)

- Social Work & Public Health Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- School of Continuing & Professional Studies Bulletin (HTML: Undergraduate, Graduate) (PDF)

2022-2023

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Business Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)
- Social Work & Public Health Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- University College Bulletin (HTML: Undergraduate, Graduate) (PDF)

2021-2022

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Business Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)
- Social Work & Public Health Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- University College Bulletin (HTML: Undergraduate, Graduate) (PDF)

2020-2021

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Business Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)
- Social Work & Public Health Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- University College Bulletin (HTML: Undergraduate, Graduate) (PDF)

2019-2020

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Business Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)
- Social Work & Public Health Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- University College Bulletin (HTML: Undergraduate, Graduate) (PDF)

2018-2019

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)
- Social Work & Public Health Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- University College Bulletin (HTML: Undergraduate, Graduate) (PDF)

2017-2018

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)
- Law Bulletin (HTML) (PDF)
- Medicine Bulletin (HTML) (PDF)
- Social Work & Public Health Bulletin (HTML) (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- University College Bulletin (HTML: Undergraduate, Graduate) (PDF)

2016-2017

- Graduate Architecture & Urban Design Bulletin (HTML) (PDF)
- Graduate Art Bulletin (HTML) (PDF)
- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Graduate Engineering Bulletin (HTML) (PDF)

- Medicine Bulletin (PDF)
- Undergraduate Bulletin (HTML) (PDF)
- University College Bulletin (HTML: Undergraduate, Graduate) (PDF)

2015-2016

- Graduate Arts & Sciences Bulletin (HTML) (PDF)
- Medicine Bulletin (PDF)
- Undergraduate Bulletin (HTML) (PDF)

2014-2016

- University College Bulletin (undergraduate & graduate) (PDF)

2014-2015

- Medicine Bulletin (PDF)
- Undergraduate Bulletin (HTML) (PDF)

2013-2014

- Medicine Bulletin (PDF)
- Undergraduate Bulletin (HTML) (PDF)

2012-2015

- Graduate Arts & Sciences Bulletin (PDF)

2012-2014

- University College Bulletin (undergraduate & graduate) (PDF)

2012-2013

- Medicine Bulletin (PDF)
- Undergraduate Bulletin (HTML) (PDF)

2011-2012

- Medicine Bulletin (PDF)
- Undergraduate Bulletin (HTML) (PDF)

2010-2011

- Medicine Bulletin (PDF)
- Undergraduate Bulletin (PDF)

2009-2012

- Graduate Arts & Sciences Bulletin (PDF)

2009-2010

- Medicine Bulletin (PDF)

2008-2010

- Undergraduate Bulletin (PDF)

2008-2009

- Medicine Bulletin (PDF)

2006-2009

- Graduate Arts & Sciences Bulletin (PDF)
and accompanying 2008 Update (PDF)

2006-2008

- Undergraduate Bulletin (PDF)

About Washington University in St. Louis

Who We Are Today

Washington University in St. Louis — a medium-sized, independent university — is dedicated to challenging its faculty and students alike to seek new knowledge and greater understanding of an ever-changing, multicultural world. The university is counted among the world's leaders in teaching and research, and it draws students from all 50 states, the District of Columbia, Guam, Puerto Rico, and the Virgin Islands. Students and faculty come from more than 100 countries around the world.

The university offers more than 250 programs and 5,500 courses leading to associate, bachelor's, master's, and doctoral degrees in a broad spectrum of traditional and interdisciplinary fields, with additional opportunities for minor concentrations and individualized programs. For more information about the university, please visit the About WashU page of our website.

Enrollment by School

For enrollment information, please visit the University Facts page of our website.

Our Mission Statement

The mission of Washington University in St. Louis is to act in service of truth through the formation of leaders, the discovery of knowledge, and the treatment of patients for the betterment of our region, our nation, and our world.

At WashU, we generate, disseminate, and apply knowledge. We foster freedom of inquiry and expression of ideas in our research, teaching, and learning.

We aim to create an environment that encourages and supports wide-ranging exploration at the frontier of discovery by embracing diverse perspectives from individuals of all identities and backgrounds. We promote higher education and rigorous research as a fundamental component of an open, vibrant society. We strive to enhance the lives and livelihoods not only of our students, patients, and employees but also of the people of the greater St. Louis community and beyond. We do so by addressing scientific, social, economic, medical, and other challenges in the local, national, and international realms.

Our goals are:

- to foster excellence and creativity in our teaching, research, scholarship, patient care, and service
- to welcome students, faculty, and staff from all backgrounds to create an inclusive, equitable community that is nurturing and intellectually rigorous

- to cultivate in students habits of lifelong learning and critical and ethical thinking, thereby enabling them to be productive members and leaders of a global society
- to contribute positively to our home community of St. Louis, and to effect meaningful, constructive change in our world

To this end we intend:

- to hold ourselves to the highest standards of excellence
- to educate aspiring leaders of great ability from diverse backgrounds
- to encourage faculty and students to be innovative, bold, independent, critical thinkers
- to build an inclusive, equitable, respectful, ethically-principled environment for living, teaching, learning, and working for the present and future generations
- to focus on meaningful and measurable outcomes for all of our endeavors

Mission statement endorsed by the Faculty Senate Council in April 2021 and approved by the Board of Trustees on October 1, 2021.

Trustees & Administration

Board of Trustees

Washington University's Board of Trustees is the chief governing body of Washington University in St. Louis. Current members of the board include the following:

Andrew Bursky
Chair

Andrew E. Newman
Vice Chair

Penny Pennington
Vice Chair

Nick Barto (*Ex Officio*)

Chris Boerner

Blackford F. Brauer

Corinna Cotsen

Lori Coulter

Arnold W. Donald

Jeffrey L. Fox

Gaurav Garg

Avram A. Glazer

John Hamilton

Stacey Hightower

Thomas Hillman

Carrie A. Johnson

Lal Karsanbhai

David W. Kemper

Jerald Kent

Alaina Maciá

Andrew D. Martin (*Ex Officio*)

Vicki Match Suna

Susan B. McCollum

Alicia S. McDonnell

James M. McKelvey, Jr.

Steven "Cash" Nickerson

Michael W. Riney

Anthony W. Ryan

Craig D. Schnuck

Nicholas Somers

Mary Danforth Stillman

Kurt A. Summers

Barbara Schaps Thomas

Lawrence E. Thomas

David A. Ulevitch

Eric B. Upin

Henry D. Warshaw

Joseph F. Wayland

Dean Yamamoto

Nicholas S. Zeppos

Please visit the Board of Trustees website for more information.

University Administration

In 1871, Washington University co-founder and then-Chancellor William Greenleaf Eliot sought a gift from Hudson E. Bridge, a charter member of the university's Board of Directors, to endow the chancellorship. Soon after this endowment was received, the position was renamed the "Hudson E. Bridge Chancellorship."

The officers of the university administration are currently led by Chancellor Andrew D. Martin. University leadership is detailed on the Washington University website.

Andrew D. Martin

Chancellor

Mark D. West

Provost

Academic Calendar

The academic calendar of Washington University in St. Louis is designed to provide an optimal amount of classroom instruction and examination within a manageable time frame, facilitating our educational mission to promote learning among both students and faculty. The dates listed here are the outline of the standard semester calendar, applicable to traditional undergraduate and many graduate programs. Certain schools or programs may have varying calendars due to the nature of particular fields of study. Please refer to the Academic Calendar page of the Office of the University Registrar's website for more information.

Fall Semester 2026

Date	Day	Description
August 24	Monday	First day of classes
September 7	Monday	Labor Day holiday (no classes)
October 3-6	Saturday-Tuesday	Fall Break (no classes)
November 25- November 29	Wednesday-Sunday	Thanksgiving Break (no classes)
December 7	Monday	Last day of classes
December 8-9	Tuesday-Wednesday	Reading days
December 10-16	Thursday-Wednesday	Final exams

Spring Semester 2027

Date	Day	Description
January 18	Monday	Martin Luther King, Jr. holiday (no classes)
January 19	Tuesday	First day of classes
March 14-21	Sunday-Sunday	Spring Break (no classes)
May 3	Monday	Last day of classes
May 4-5	Tuesday-Wednesday	Reading days
May 6-12	Thursday-Wednesday	Final exams

Commencement

Date	Day	Description
May 21	Friday	Class of 2027 Commencement

Summer Semester 2027

Date	Day	Description
May 24	Monday	First Summer Session begins
May 31	Monday	Memorial Day holiday (no classes)
July 5	Monday	Independence Day holiday observed (no classes)
August 19	Thursday	Last Summer Session ends

Religious Holiday Class Absence Policy

As home to students, faculty, and staff of all the world's major religions and as a non-sectarian institution, Washington University in St. Louis values the rich diversity of spiritual expression and practice found on campus. It is therefore the policy of the university that students who miss class, assignments, or exams to observe a religious holiday should be accommodated as follows:

1. Absences should be counted as excused in any course in which attendance is a measure of academic performance;
2. Reasonable extensions of time should be given, without academic penalty, for missed assignments; and
3. Exams should be reasonably rescheduled without academic penalty.

To ensure that accommodations may be made, students who plan to miss class for a religious holiday must inform their instructors in writing *before the end of the third week of class* or as soon as possible if the holiday occurs during the first three weeks of the semester. Instructors should inform students on their syllabus and/or at the start of the class how they would like students to notify them of any accommodation needs related to religious observance.

Absence for religious reasons does not lessen students' responsibility for coursework or material covered during their absence. It is incumbent on the student who misses a class to catch up on any material discussed and assignments given during that class period. If a student believes that they have not received a reasonable accommodation despite engaging with their instructor on the topic, they should follow the course grievance process outlined by their school.

The Office for Religious, Spiritual & Ethical Life provides a list of Religious & Spiritual Holidays that fall within the academic year. This list is not a designation of religious holidays recognized by the university, and it is not meant to be comprehensive; it is simply a guide to help students and instructors plan their courses and assignments.

For Faculty

Every effort should be made to avoid scheduling exams on religious holidays, particularly those with work restrictions as noted on the holiday calendar.

Faculty should be supported in establishing a teaching schedule that allows them to avoid conflict with their observance of religious holidays. Where this is not possible, faculty should make up any missed class(es) in the method most appropriate to student learning in their course (e.g., rescheduling for an alternate time, providing asynchronous material, engaging a guest lecturer). Appropriate advance notice should be provided to students.

Any instructor with concerns regarding either a given holiday or the academic implications of a particular student's religious observance of holidays may seek guidance from the chair of their department, the dean of their school, or the Director for Religious, Spiritual & Ethical Life.

Campus Resources

Student Support Services

The Learning Center

The Learning Center, located on the lower level of the Mallinckrodt Center and housed within the Center for Teaching and Learning, is the hub of academic support at Washington University in St. Louis. The Learning Center's programs are designed to support students in their course work by helping them develop the lifelong skill of "learning how to learn" and by stimulating their independent thinking. All services are free (with the exception of MCAT prep), and each year more than 1,800 students participate in one or more of our programs.

The Learning Center offers support for foundational courses through Peer-Led Team Learning and our drop-in mentoring programs (Residential Peer Mentoring and Drop-In Academic Mentoring). Individual peer-led coaching is available for academic skills such as time management, study strategies, note-taking, accessing resources, and managing test anxiety. Other services offered include small group mentoring for eligible students and an MCAT preparation program.

For more information, visit the Learning Center website or call 314-935-2066.

Disability Resources

Disability Resources supports students with disabilities by fostering and facilitating an equal access environment for the Washington University community of learners. Disability Resources partners with faculty and staff to facilitate academic and housing accommodations for students with disabilities on the Danforth Campus. Students enrolled in the School of Medicine should contact their program's director. Please visit the Disability Resources website or call 314-935-5970 for more information.

TRIO: Student Support Services

TRIO is a federally funded program that provides customized services for undergraduate students who are low income, who are the first in their family to go to college, and/or who have a documented disability. Services include academic coaching, academic peer mentoring, cultural and leadership programs, summer internship assistance and post-graduation advising. First-year and transfer students are

considered for selection during the summer before they enter their first semester. Eligible students are encouraged to apply when they are notified, because space in this program is limited. For more information, visit the TRIO Program website.

Medical Student Support Services

For information about Medical Student Support Services, please visit the School of Medicine website.

Office for International Students and Scholars

The Office for International Students and Scholars (OISS) is dedicated to fostering an inclusive environment that celebrates our international students' and scholars' diverse experiences, cultures, and aspirations. OISS plays a pivotal role in cultivating a vibrant, intercultural atmosphere on our campus, extending support to international students, scholars, faculty, and staff through immigration sponsorship. OISS commits to ensuring a seamless integration process for those who are admitted, appointed, or employed by Washington University. Grounded in the belief that education can shape global perspectives, the OISS mission is to empower the Washington University international community with the knowledge and resources needed to navigate U.S. immigration compliance while guiding them with care and compassion at every step.

OISS has locations on both the Danforth Campus and the Medical Campus. For information about OISS locations, office hours, staff, and services, visit the Office for International Students and Scholars website, email oiss@wustl.edu, or call 314-935-5910.

Office of Military and Veteran Services

This office serves as the university's focal point for military and veteran matters, including transitioning military-connected students into higher education, providing and connecting students with programs and services, and partnering across campus and in the community. Services include advising current and prospective students on how to navigate the university and maximize Department of Defense and Veterans Affairs (VA) educational benefits, transition support, Veteran Ally training for faculty and staff, veteran-unique programming, and connecting students to campus and community resources. Military-connected students include veterans, military service members, spouses, dependent children, caregivers, survivors and Reserve Officer Training Corp cadets. There are two university policies that apply to students who still serve in the Armed Forces and students who use VA educational benefits:

- The Policy on Military Absences, Refunds and Readmissions applies to students serving in the U.S. Armed Forces and their family members when military service forces them to be absent or withdraw from a course of study.

- The Policy on Protections for VA Educational Benefit Users applies to students using VA education benefits when payments to the institution and the individual are delayed through no fault of the student.

The Office of Military and Veteran Services is located in Umrath Hall on the Danforth Campus. Please visit the Military and Veteran Services website or send an email to veterans@wustl.edu for more information.

Relationship and Sexual Violence Prevention (RSVP) Center

The RSVP Center offers free and confidential services including 24/7 crisis intervention, counseling services, resources, support and prevention education for all students on the Danforth Campus. The RSVP Center operates from a public health model and uses trauma-informed practices to address the prevalent issues of relationship and sexual violence. By providing support for affected students, it is our goal to foster post-traumatic growth and resilience and to help ensure academic retention and success. Our prevention efforts call for community engagement to engender an intolerance of violence and an active stance toward challenging cultural injustices that perpetuate such issues. Learn more at the RSVP Center website.

WashU Cares

WashU Cares assists the university with handling situations involving the safety and well-being of Danforth Campus students. WashU Cares is committed to fostering student success and campus safety through a proactive, collaborative and systematic approach to the identification of, intervention with and support of students of concern while empowering all university community members to create a culture of caring. If there is a concern about the physical or mental well-being of a student, please visit the WashU Cares website to file a report.

The Writing Center & Speaking Studio

The Writing Center & Speaking Studio — a free service — offers writing and public speaking support to all Washington University undergraduate and graduate students. Tutors will read and discuss any kind of work in progress, including student papers, senior theses, application materials, dissertations and oral presentations. The Writing Center staff is trained to work with students at any stage of the writing process, including brainstorming, developing and clarifying an argument, organizing evidence, and improving style. Rather than editing or proofreading, tutors will emphasize the process of revision and teach students how to edit their own work.

The Writing Center is located in Mallinckrodt Center on the lower level. Appointments are preferred and can be made online, but walk-ins will be accepted if tutors are available. Dedicated Undergraduate Walk-in Hours are held in the second half of each semester (after fall break and spring break) on Tuesday and Wednesday afternoons. Questions? Email writing@wustl.edu.

Student Health and Well-Being Services, Danforth Campus

The Student Health Center – Danforth Campus provides medical, psychiatric, and health promotion services for undergraduate and graduate students on the Danforth Campus. Please visit the Student Health Center – Danforth Campus website for more information about Health Center services and staff members.

Hours:

Monday, Tuesday, Thursday, and Friday: 8 a.m. - 5 p.m.

Wednesday: 10 a.m. - 5 p.m.

Saturday, Sunday, and university holidays: Closed

For after-hours care, students should access TimelyCare.

Medical Services

Medical Services staff members provide care for the evaluation and treatment of an illness or injury, preventive health care and health education, immunizations, nutrition counseling, sports medicine, travel medicine, and sexual health services. Student Psychiatry Services staff provide ongoing medication management for students to address their mental health concerns. Student Health Center providers are participating members of the Washington University in St. Louis Physician's Network. Any condition requiring specialized medical services will be referred to an appropriate specialist. The Health Center accepts health insurance plans that have met waiver criteria for the Student Health Insurance Plan and will be able to bill the plan according to plan benefits. The Student Health Insurance Plan requires a referral for medical care any time care is not provided at Student Health (except in an emergency). Call 314-935-6666 or visit the Student Health Center – Danforth Campus website to schedule an appointment.

Appointments are also available for the assessment and referral of students struggling with substance use.

The Student Health Center lab provides full laboratory services. Some tests can be performed in house. The remainder of all testing that is ordered by Student Health is completed by LabCorp. LabCorp serves as Student Health's reference lab, and it is a preferred provider on the student health insurance plan. This lab can perform any test ordered by Student Health Center providers or outside providers.

All incoming students must provide proof of immunization for measles, mumps, and rubella (i.e., two vaccinations after the age of one year old; a titer may be provided in lieu of the immunizations). Proof of receiving a meningococcal vaccine on or after the age of 16 is

required for all incoming undergraduate students. A TB test in the past six months is required for students entering the university who screen positive on the TB questionnaire found on the student portal. It is also recommended that before beginning their studies at WashU, all students will have received the tetanus diphtheria pertussis immunization, the hepatitis A vaccine series, the hepatitis B vaccine series, the HPV vaccine series, the meningitis B vaccine, and the varicella vaccine. Failure to complete the required forms will delay a student's registration and prevent their entrance into housing assignments. Please visit the Student Health Center website for complete information about immunization requirements and deadlines.

Health Promotion Services

Health Promotion Services staff and Peer Health Educators provide free programs and risk reduction information related to mental health, sexual health, alcohol/other drugs, and community care. For more information, visit the Zenker Wellness Suite in Sumers Recreation Center, consult the Health and Wellbeing Digital Library, follow us on Instagram (@washu_healthpromotion), and/or email wellness@wustl.edu. In 2018, this department launched the WashU Recovery Community to provide an opportunity for students in recovery from substance use to connect with other students with similar experiences.

Center for Counseling and Psychological Services (CCPS)

Hours:

Monday, Tuesday, Thursday, and Friday: 8 a.m. - 5 p.m.

Wednesday: 10 a.m. - 5 p.m.

Saturday, Sunday, and university holidays: Closed

For after-hours mental health support, students should access the TimelyCare app and request a "Talk Now" visit.

Located in the Student Health Center-Danforth Campus, CCPS is staffed by licensed professional staff members who work with students to resolve personal and interpersonal difficulties. These may include conflicts with or worry about friends or family, concerns about eating or drinking patterns, and feelings of anxiety and depression. Services include individual, group, and couples counseling; crisis counseling; and referral for off-campus counseling when students' needs can be better met outside of CCPS. All full-time students who pay the university health and wellness fee as part of their tuition are eligible for services. Visit the CCPS website or call 314-935-6695 to schedule an appointment during business hours. For additional information, visit the CCPS website or send an email to ccpscoordinator@wustl.edu.

Important Information About Health Insurance and Fees for Danforth Campus Students

All full-time, degree-seeking WashU students are automatically enrolled in the Student Health Insurance Plan upon completion of registration. Students may opt out of this coverage and receive a refund of the health insurance fee if they provide proof of existing comprehensive insurance coverage that meets all university requirements. Information concerning opting out of the student health insurance plan can be found online after June 1 of each year. All students must request to opt out by September 5 of *every year* in which they wish to be removed from the Student Health Insurance Plan. The Student Health Center provides billing services to many of the major insurance companies in the United States. Specific fees and copays apply to students using Medical Services and Student Psychiatric Services; these fees are billable to the students' insurance plans. More information is available on the Student Health Center – Danforth Campus website.

In addition, WashU has a health and wellness fee designed to improve the health and well-being of the campus community. It is assessed by the university, and it is entirely separate from health insurance. This fee helps support membership to the Summers Recreation Center, health education/prevention efforts, the Center for Counseling and Psychological Services, and TimelyCare.

Student Health Services, Medical Campus

For information about student health services on the Medical Campus, please visit the Student & Occupational Health Services page of the School of Medicine website.

Campus Security

The Washington University campus is among the most attractive in the nation, and it enjoys a safe and relaxed atmosphere. Personal safety and the security of personal property while on campus is a shared responsibility. Washington University has made safety and security a priority through our commitment to a full-time professional police department, the use of closed-circuit television, card access, extensive lighting initiatives based on Crime Prevention Through Environmental Design (CPTED) practices, shuttle services, emergency telephones, and ongoing educational safety awareness programs. The vast majority of crimes that occur on college campuses are crimes of opportunity, which can be prevented.

The best protection against crime is an informed and alert campus community. Washington University has developed several programs to help make everyone's experiences here safe and secure. An extensive network of emergency telephones — including more than 200 "blue light" telephones — is connected directly to the University Police

Department and can alert the police to a person's exact location. In addition to the regular shuttle service, an evening student walking/mobile escort service known as "Bear Patrol" and a mobile Campus Circulator shuttle are available on the Danforth Campus.

The Campus2Home shuttle will provide a safe ride home for those living in four designated areas off campus — Skinker-DeBaliviere, Loop South, north of the Loop, and just south of the campus — within these boundaries:

- North – Olive Blvd
- South – Clayton Road
- East – Union Blvd
- West – Hanley Road

Shuttles will run from 7:00 p.m. to 4:00 a.m. seven days a week during academic sessions. Rides should be requested via the TripShot app. Pickup locations to choose from are the Mallinckrodt Center, the Summers Welcome Center, and the Knight Center. The shuttle takes passengers directly to the front doors of their buildings. Shuttle drivers will then wait and watch to make sure passengers get into their buildings safely.

The University Police Department is a full-service organization staffed by certified police officers who patrol the campus 24 hours a day throughout the entire year. The department offers a variety of crime prevention programs, including a high-security bicycle lock program, computer security tags, personal safety classes, and security surveys. Community members are encouraged to download and install the WashU Safe personal safety app on their phones; this app allows users to call for help during emergencies, to use Friend Walk to track their walks on and off campus, and to access many additional safety features. For more information about these programs, visit the Washington University Police Department website.

WashU PD also has comfort dogs — Bear, Brookie, Misty, and Archie — on campus to support our students, faculty, and staff. In addition, there is a decompression/comfort room inside the police station at 6615 Shepley Drive on the South 40. This room offers a supportive, stress-free, and welcoming environment designed to promote wellness and connection with the officers and the comfort dogs. Students are welcome to walk in at any time, or they can schedule a visit by emailing wupddogs@wustl.edu to secure a dedicated time with the dogs.

In compliance with the Campus Crime Awareness and Security Act of 1990, Washington University publishes an annual report entitled *Safety & Security: Guide for Students, Faculty, and Staff — Annual Campus Security and Fire Safety Reports and Drug & Alcohol Abuse Prevention Program*. This report is available to all current and prospective students on the Danforth Campus and to university employees on the Danforth, North and West campuses. To request a hard copy, contact the Washington University Police Department, 6615 Shepley Drive, Clayton, MO 63105, 314-935-5555.

For information regarding protective services at the School of Medicine, please visit the Campus Safety page of the Washington University Operations & Facilities Management Department.

Student Complaints

WashU provides students with different processes to handle complaints depending on the nature of the complaint. The Student Feedback & Complaint Form provides information on the different avenues available, as well as a web-form for submitting complaints. Complaints submitted through the form are reviewed by the Office of the Vice Chancellor for Student Affairs and forwarded to the University office or department that would be responsible for addressing the complaint. Complaints may be made anonymously, but students have the option of providing contact information to receive a response regarding steps taken to resolve the complaint. The University's Whistleblower Protection Policy applies to students making good-faith complaints regarding violations of policy or unethical acts.

If a student has a complaint related to distance education, as a participant in the National Council for State Authorization Reciprocity Agreements (NC-SARA), WashU follows the SARA policy that provides for the resolution of complaints resulting from distance education courses, activities, and operations delivered by WashU to students who participate in such courses outside of the state of Missouri (including the District of Columbia, Puerto Rico, and the US Virgin Islands, but excepting California, which is not a member of NC-SARA). Under NC-SARA Policy Section 4.5 (Process for Resolving Complaints), students are asked to seek resolution of complaints first through WashU, as described above. If the complaint is not resolved, distance education students should contact the Missouri State Portal Entity:

Joshua Fischer, Program Specialist
Email: joshuafischer@dhewd.mo.gov
Phone: 573-751-2361
Missouri Department of Higher Education and Workforce
Development
PO Box 1469
Jefferson City, MO 65102-1469

Students who participate in distance education courses and who reside in California may contact the Bureau for Private Postsecondary Education.

University Policies

Washington University has various policies and procedures that govern our faculty, staff and students. Highlighted below are several key policies of the university. Web links to key policies and procedures are available on the Office of the University Registrar website and on the University Policies page. Please note that the policies identified on these websites and in this *Bulletin* do not represent an entire repository of university policies, as schools, offices, and departments may implement policies that are not listed. In addition, policies may be amended throughout the year.

Application to Graduate

Students are required to apply for program completion in Workday, by the deadline relevant to the semester in which they intend to graduate, in order to be eligible for degree conferral. Additional information is available from the Office of the University Registrar.

Compliance with Section 103 of the Veterans Benefits and Transition Act of 2018

It is WashU's policy to not impose penalties on individuals using Veteran Education Benefits, including the assessment of late fees, the denial of access to classes, libraries or other institutional facilities, or the requirement to borrow additional funds to cover the student's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment by the VA. This applies to individuals who submit their Certificate of Eligibility for entitlement to educational assistance to their VA School Certifying Official (SCO).

1. Students should submit a Certificate of Eligibility not later than the first day of a course for which the student wishes to use the entitlement for educational assistance. The SCO will advise the student to provide additional Documentation and information necessary for the proper certification of enrollment.
2. If a student does not receive their Certificate of Eligibility from the VA by the start of the academic term, the student should notify their SCO of their intent to use Veteran Education Benefits and should submit additional Documentation and forms as requested.
3. In cases where a student is unable to meet a financial obligation to the university because the amount of a disbursement from the VA is less than anticipated, the university will require additional payment from the student and will provide the student with a timeline for payment before assessing late fees. Students should contact their SCO for assistance.
4. Students may request certification for previous academic terms if they were eligible for benefits at the time for which they want to be certified. In cases where Veteran Education Benefits are used to certify previous academic terms, students are responsible for any late fees incurred prior to the date of the certification request. This excludes Yellow Ribbon benefits, which are not retroactive for previous fiscal years.

Courses and Credit

Academic Calendar

Washington University in St. Louis primarily follows a standard semester-based academic calendar: a fall and spring semester, each spanning 16 calendar weeks, including sessions of half-semester lengths and intersessions beginning before the term start date, and

a summer term of 13 weeks, including sessions of half-term length, an intercession beginning before the term start date, and 3-, 5- and 8-week lengths. The Doctor of Medicine program follows a yearlong calendar supporting modular curriculum delivery.

Credit Measure

Credit hours for undergraduate and graduate programs are awarded as “units” based on the University Statement on Credit, which is in alignment with the Federal definition found in 34 CFR 600.2.

Email Communication

Email is the mechanism for official communication with students at Washington University. Students are expected to read email communications from the university in a timely fashion.

All students will be individually assigned a University email address, which will be maintained in the University email directory. Official University communications will be sent to the student's University email address in order to ensure such communications reach the intended recipient.

With the exception of School of Medicine students, a student may have email forwarded from their assigned University email address to another email address of the student's choice. School of Medicine students are prohibited from forwarding their University-assigned email address to an email address external to the University other than @bjc.org and @va.gov email domains. Students who choose to have email forwarded to another email address do so at their own risk. The University is not responsible for email forwarded to any other email address. A student's failure to read official University communications sent to the student's University email address does not absolve the student of responsibility for awareness of and compliance with the content of the official communication. Faculty and administrators should use a student's University email address when communicating via email with the student. This policy will ensure that all students will be able to comply with course and other requirements communicated to them by email from course instructors and administrators.

Graduate Student Academic Integrity

Authority of Schools Over Graduate and Graduate Professional Students

1. Each school at the university may establish an academic integrity officer and/or a panel to hear and decide cases of alleged academic or professional misconduct by its graduate or graduate professional students. Schools that so choose are required to create procedures to govern the process of investigating and adjudicating the complaints filed.

- a. The school dean, or a designee, determines the composition of such a panel and the scope of the panel's authority, which will not exceed the parameters set out immediately below.
 - b. The panel has authority to impose or recommend appropriate sanctions to the school dean, including suspension or expulsion, if academic or professional misconduct is determined.
 - c. Appeals of decisions made by an academic and professional integrity panel of a school may be made to the school dean, whose decision is final. This includes decisions of a school's academic and professional integrity panel, where the panel is vested with such authority, and the panel's decision is to impose the sanctions of suspension or expulsion. Schools are permitted, but not required, to establish an intermediate level of appeal that must be completed before a final appeal to the dean.
 - d. Except for cases falling within the immediately preceding sub-bullet, any appeal from a decision of a dean of a school to suspend or expel a student will be made in accordance with the provisions of Section VI of the Code.
2. If a school does not establish an academic integrity officer or panel or if an established officer or panel fails to function, complaints of academic or professional misconduct against graduate or graduate professional students may be heard by Academic Integrity in the Office of the Provost, the Academic Integrity Board, or the Student Conduct Board.

Source: Washington University Student Conduct Code IV.A.6

International Travel

WashU is concerned with the health, safety, and security of all members of our community while they are traveling outside of the United States of America.

The WashU International Travel Policy has been adopted to ensure a consistent set of travel standards to be followed by all units of the university. The policy applies to all international travel that is sponsored by, that is funded in any part by, or that involves registered academic experiences at Washington University in St. Louis.

The full text of the International Travel Policy is available on the WashU Global website.

Involuntary Leave

Policy Statement

The primary goals of this Involuntary Leave Policy (“policy”) are to protect the well-being and safety of Washington University students and the university community and to preserve the integrity of the university's academic, residential and administrative functions.

An involuntary leave under this policy will not be invoked unless the student's behavior is of such a serious nature that the continued presence of the student at the university is judged to threaten the safety, well-being or health of that student and/or others in the WashU community, or the ability of that student or others to engage in customary functions and activities at the university.

Examples of circumstances where this policy may be invoked include: suicidal threats; self-starvation or purging behavior; substance abuse or addiction; threats of harm to self or others; or disturbing, disruptive or destructive behavior.

This policy is not intended to replace disciplinary actions taken in response to violations of other university policies, including the university Student Conduct Code (SCC). A student who commits a violation of any university policy before taking voluntary leave or being placed on involuntary leave may be required to defend such charges before being considered for re-admission. Temporary suspension may also be issued in accordance with the SCC and this policy.

Policy Procedures

The vice chancellor for student affairs, the dean of any school or the designees of any of the aforementioned (referred to herein as "administrator") may be alerted to a student's concerning behavior from a variety of sources on campus including the student's advisor, a college dean, residential life staff, student affairs staff, health care providers or other faculty members. If the administrator deems it appropriate, the following procedures may be initiated.

1. **Notification:** Whenever possible, the administrator will notify the student that involuntary leave is under consideration and attempt to meet with the student to discuss his or her behavior. The administrator will provide the student with a copy of this policy. During the meeting, the administrator may choose to encourage the student to take a voluntary leave of absence, thereby eliminating the need to complete the procedures for involuntary leave. If the administrator believes that the student's well-being may be in imminent danger, he or she may proceed with a case conference without notifying and/or meeting with the student.
2. **Assembly of Case Conference Committee:** If the student is unable or chooses not to meet with the administrator, or if the student chooses not to take a voluntary leave of absence and the administrator still believes that involuntary leave may be appropriate, the administrator will convene a Case Conference Committee ("committee") of appropriate individuals or their designates to conduct a case conference regarding the need for an involuntary leave of absence. The committee may include the following:
 - The dean of the student's college or school
 - The assistant/associate vice chancellors for student affairs
 - Student conduct administrator
 - Director of the Student Health Center, Danforth Campus
 - Director of Counseling and Psychological Services
 - Assistant director of sorority and fraternity life
 - Executive director of Campus Life

- Chief of police
- Residential Life staff
- Director of the Office of International Students & Scholars
- Office of the General Counsel
- The student's advisor(s) or academic dean
- Professors, instructors, or staff who have observed the student's behavior of concern

3. **Committee Consideration:** The administrator should convene a Case Conference as soon as possible. During this conference, the committee should address whether and to what extent the student engages in, or is judged to be likely to engage in, behavior described in this policy. Where deemed necessary by the committee to facilitate a more informed recommendation, the committee may consult with other university administrators, faculty or staff familiar with the student. The committee may seek additional information from the student or enlist the assistance of other university faculty or staff members familiar with the student to consult with the student on behalf of the committee. If contacted, the student may refuse to provide information, but such refusal shall not limit the right of the committee to make a recommendation under this policy, nor limit the right of the university to mandate an involuntary leave.
4. **Committee Recommendation:** Following the Case Conference and the review of relevant information, the committee will make a written recommendation to the administrator. In lieu of recommending involuntary leave, the committee may make recommendations as to other conditions and/or requirements under which the student may remain at the university.
5. **Decision:** After review of the committee's recommendation, the administrator will decide whether to mandate an involuntary leave of absence, to mandate other requirements if the student remains at the university, or to permit the student to remain at the university with no additional requirements. The administrator will give the student written notice of this decision. This notice will provide (1) a brief summary of the reasons for decision, (2) the duration of the leave or a description of the requirements for the student to remain on campus, and (3) the steps that the student must take to request readmission if involuntary leave is invoked. The administrator may notify a parent or guardian, in accordance with the Family Educational Rights & Privacy Act ("FERPA"). Pursuant to FERPA, the administrator may also notify a spouse or partner upon obtaining the student's consent. Where an involuntary leave is mandated, the student must leave campus within the time frame established in the notice. In that event, the student's parent(s), guardian(s) or other persons may be asked to make arrangements for the safe removal of the student from the university community.

Option of Voluntary Leave

At any time prior to the administrator's decision, the student may choose to take voluntary leave. The university expects students to notify family members when they voluntarily withdraw from the university. However, when permitted by FERPA, the university retains the discretion to notify parents, guardians, spouses or partners if the student chooses to leave.

Records and Tuition

Leave may affect academic grades, credits and access to university housing or other facilities. Tuition, financial aid, and housing costs will be refunded in accordance with university policy. Regardless of whether leave is voluntary or involuntary, the student's status at the university will be updated in student systems to reflect a leave of absence, which includes a notation on the transcript indicating: "Leave of Absence" and the start date. When involuntary leave is not mandated, but a student is required to fulfill certain requirements to remain on campus, the student's in-progress status is unchanged and no notation will be made on the transcript.

Safety and Security

In cases involving serious and imminent threat to the safety, well being or health of the student or other members of the campus community, or to the ability of others in the university community to conduct their customary university functions and activities, the administrator may take immediate action to remove the student from the university community. In such event, the administrator may immediately notify the student's parent, guardian, spouse, partner, or other relevant individuals in accordance with FERPA. The parent, guardian or other person may be asked to make arrangements for the safe removal of the student from the university community pending a decision on involuntary leave.

Request for Re-Enrollment

When a student is placed on involuntary leave or accepts voluntary leave, a letter from the administrator to the student will outline the conditions for re-enrollment. Conditions for re-enrollment are at the discretion of the administrator. If the leave was for health or medical reasons, the administrator will work with the director of health services or his/her designate to formulate appropriate conditions of return, which may include requirements and/or guidance regarding treatment. A copy of this letter will be forwarded to the academic dean of the student's college or school and, where health-related, to the director of the Student Health Center.

When a student's voluntary or involuntary leave is not health-related, the procedures to request re-enrollment will be outlined in the administrator's letter.

The following process will guide re-enrollment for all students taking involuntary or voluntary leave of absence for a health-related reason:

1. The student must contact in writing both the academic dean and the director of the Student Health Center to request re-enrollment between June 1 and July 1 for the upcoming fall semester or November 1 and December 1 for the spring semester.
2. The student's health status must be reviewed by the director of the Student Health Center or his/her designate. As part of the review, the student may be asked to present written evidence that the student has been evaluated and completed follow-up measures recommended by the student's treating health care professional. This evidence may include a recitation of the health care professional's credentials, a description of their contact with the student, the evaluation method, the diagnosis, the recommended follow-up measures and the student's efforts to complete them. The student's efforts to complete those follow-up measures will be evaluated to determine whether the student used the time away from the university to address the issues that led to the separation and to acquire skills to facilitate a successful return to the university.
3. A recommendation regarding medical eligibility for re-enrollment will be made by the director of the Student Health Center or his/her designate and forwarded to the student's academic dean and the administrator. The academic dean, in consultation with the administrator, will determine academic eligibility for re-enrollment and will communicate in writing the final decision and any conditions to the student.

Appeal of Administrator Decisions

A student may submit, within 24 hours of receiving the written decision from the administrator, a written appeal to the provost who will review the written record only. A decision to affirm or reverse the administrator's decision will be rendered within 48 hours. The decision of the administrator will be affirmed if supported by substantial information appearing in the record of the case. The decision of the provost is final.

Confidentiality

The university will strive to protect, to the greatest extent possible, the confidentiality of students involved in matters of voluntary or involuntary leave. Because the university has an obligation to preserve the security of its community, the university cannot guarantee complete confidentiality where it would conflict with the university's obligation to investigate meaningfully matters which may threaten a student's health or safety or the safety and security of the university community. When some disclosure of the university's information or sources is necessary, that disclosure will be limited to the extent possible. Medical records of a student will be protected in accordance with the WashU Student Health Center Notice of Privacy Practices. The university will, to the extent permitted by law, keep confidential all records of committee reviews. The records maintained by the Case Conference Committee will be available only to the administrator.

and other university officials in accordance with FERPA. All records will be destroyed after a period of ten (10) years from the date of final decision on involuntary leave or the student's decision to take voluntary leave.

Nondiscrimination Statement

Washington University encourages and gives full consideration to all applicants for admission, financial aid, and employment. The university does not discriminate in access to, treatment during, or employment in its programs and activities on the basis of race, color, national origin (including shared ancestry or ethnic characteristics), citizenship (where prohibited by federal law), age, religion, sex, sexual orientation, gender identity or expression, veteran status, disability, or genetic information.

Policy on Discrimination and Harassment

Washington University is committed to having a positive learning and working environment for its students, faculty, and staff. University policy prohibits discrimination on the basis of race, color, age, religion, sex, sexual orientation, gender identity or expression, national origin (including shared ancestry or ethnic characteristics), citizenship (where prohibited by federal law), veteran status, disability, or genetic information. Harassment based on any of these classifications is a form of discrimination; it violates university policy and will not be tolerated. In some circumstances, such discriminatory harassment may also violate federal, state, or local law. A copy of the Discrimination and Harassment Policy is available on the Human Resources website.

Conduct Prohibited by Title VI

Title VI of the Civil Rights Act of 1964 prohibits discrimination based on race, color, or national origin in programs that receive federal financial assistance. Discrimination on the basis of race, color, or national origin includes discrimination or harassment based on a person's actual or perceived 1) shared ancestry or ethnic characteristics; or 2) citizenship or residency in a country with a dominant religion or distinct religious identity (such as individuals who are Hindu, Jewish, Muslim, Buddhist, or Sikh). Such conduct is prohibited by the Discrimination and Harassment Policy.

Sexual Harassment

Sexual harassment is a form of discrimination that violates university policy and will not be tolerated. It is also illegal under state and federal law. Title IX of the Education Amendments of 1972 prohibits discrimination based on sex (including sexual harassment and sexual violence) in the university's educational programs and activities. Title IX also prohibits retaliation for asserting claims of sex discrimination. The university has designated the Title IX Coordinator identified below to coordinate its compliance with and response to inquiries concerning Title IX.

For more information or to report a violation under the Policy on Discrimination and Harassment, please contact the following individuals:

Discrimination and Harassment Response Coordinators

Apryle Gladney, Vice Chancellor and Chief Human Resources Officer
Phone: 314-935-1252
apryle.gladney@wustl.edu

Gillian Lawson, Director of Investigations, Office of Institutional Equity
Phone: 314-935-1139
oie-investigations@wustl.edu; gillian.boscan@wustl.edu

Office: The Link in the Loop
Address: 621 N. Skinker Blvd., Suite 300, St. Louis, MO 63130
WashU University Reporting Hotline

Title IX Coordinator

Jessica Kennedy, Director & Title IX Coordinator, Office of the Provost
Phone: 314-935-3118
jwkennedy@wustl.edu

Office: Umrath Hall, Room 001
Address: One Brookings Drive, MSC 1175-0153-0B, St. Louis, MO 63130

Inquiries or complaints regarding civil rights may also be submitted to the United States Department of Education's Office of Civil Rights at 400 Maryland Avenue, SW, Washington, DC 20202-1100; by visiting the U.S. Department of Education website; or by calling 800-421-3481.

Student Academic Records and Transcripts

Under the Family Educational Rights and Privacy Act of 1974 (FERPA) — Title 20 of the United States Code, Section 1232g, as amended — current and former students of the university have certain rights with regard to their educational records. Washington University's FERPA policy is available via the Office of the University Registrar's website.

All current and former students may request official Washington University transcripts of their academic records from the Office of the University Registrar. Current students may print unofficial transcripts for their personal use from Workday. Instructions and additional information are available on the Office of the University Registrar's website.

Washington University does not release nor certify copies of transcripts or other academic documents received from other schools or institutions. This includes test score reports and transcripts submitted to Washington University for purposes of admission or evaluation of transfer credit.

Academic records may not be altered after degree conferral, at which time records are considered closed or sealed.

Student Conduct

The Washington University in St. Louis Student Conduct Code (“the Code”) sets forth community standards and expectations for university students. These community standards and expectations are intended to foster an environment conducive to working, learning, and inquiry. Each student is held to the expectations outlined in the Code.

Freedom of thought and expression as well as respect for different points of view are essential to the university’s academic mission. Nothing in the Code should be construed to limit the lawful, free, and open exchange of ideas and viewpoints, even if that exchange proves to be offensive, distasteful, or disturbing to some. However, such speech must conform to university policies.

The Code also describes general procedures that may be used to ensure that these standards and expectations are upheld by all students. The university is committed to ensuring that students adhere to university policies, take responsibility for their actions, and recognize how their choices may affect others.

Complaints against students that include allegations of sex-based discrimination — including sexual harassment, sexual assault, dating violence, domestic violence and stalking — in violation of the Student Conduct Code are governed by the procedures found on the Gender Equity and Title IX Compliance Office website. These procedures are also available in hard copy from the Title IX Coordinator or the director of the Office of Student Conduct and Community Standards.

Students may be accountable to both governmental authorities and to the university for acts that constitute violations of law and the Student Conduct Code.

For a complete copy of the Student Conduct Code, visit the Student Affairs website.

For more information, visit the Student Conduct and Community Standards website.

Student Financial Responsibility

Communication

Washington University in St. Louis uses University-assigned email accounts and University-supported systems for communication with students and authorized users. Washington University will also contact students via personal email addresses, cellular phone numbers, or wireless devices from time to time regarding the Student Account or other general information. Students are responsible for reading University communications in a timely manner.

Promise to Pay

When students register for any course at or receive any service from Washington University in St. Louis, they accept full responsibility to pay all tuition, fees, and other associated charges assessed as a result of registration and/or receipt of services such as housing, dining, and other University-provided items that exceed financial support provided by the University, the University payment plan, and/or third parties by the scheduled due dates shown on the WebSTAC student account. Failure to attend class or receive a bill does not absolve students of financial responsibility as described above.

Failure to Pay

University policies regarding Student Accounts (including payment options, late fees, holds, and refunds) are published on the University’s Financial Services website. If a student fails to pay the Student Account balance by the scheduled due dates, the University will place a financial hold preventing the student from registering for future courses and could assess a late fee on the past due portion until the past due amount is paid in full. Failure to pay will result in a Delinquent Student Receivable Account. Delinquent Student Accounts will be referred to University’s Collection Services department. Collection Services may report the Delinquent Student Account to one or more national credit bureaus, refer the Delinquent Student Account to a third-party collection agency, and pursue all legal and equitable remedies to collect the monies owed to the University.

Student Health

Drug and Alcohol Policy

Washington University is committed to maintaining a safe and healthy environment for members of the university community by promoting a drug-free environment as well as one free of the abuse of alcohol. Violations of the Washington University Drug and Alcohol Policy will be handled according to existing policies and procedures concerning the conduct of faculty, staff, and students. This policy is adopted in accordance with the Drug-Free Workplace Act and the Drug-Free Schools and Communities Act.

Tobacco-Free Policy

Washington University is committed to providing a healthy, comfortable and productive work and learning environment for all students, faculty, and staff. Research shows that tobacco use in general, including smoking and breathing secondhand smoke, constitutes a significant health hazard. The university strictly prohibits all smoking and other uses of tobacco products within all university buildings and on university property, at all times. A copy of our complete Tobacco-Free and Smoke-Free Policy is available on the Washington University Human Resources website.

Medical Information

Entering students in Danforth Campus programs must provide medical information to the Student Health Center – Danforth Campus. This will include the completion of a health history and a record of all current immunizations.

If students fail to comply with these requirements prior to registration, they must obtain the required vaccinations and tests at the Student Health Center – Danforth Campus or in the community. Students will be assessed the costs of the vaccinations and/or tests. Students will be unable to complete registration for classes until all health requirements have been satisfied.

Noncompliant students may be barred from classes and from all university facilities, including housing units, if in the judgment of the university their continued presence would pose a health risk to themselves or to the university community.

Medical and immunization information is to be given via the student health portal on the Student Health Center – Danforth Campus website. All students who have completed the registration process should access the student health portal on the website. Students should fill out the form and follow the instructions for transmitting it to the Student Health Center – Danforth Campus. Student information is treated securely and confidentially.

Entering students in Medical Campus programs must follow the requirements as outlined on the WashU Medicine Student Health Services website.

Student Status: Expulsion and Dismissal

The terms *expulsion* and *dismissal* are used to indicate distinct types of involuntary separation of a student from the university or from their program of study.

- *Expulsion* refers to a permanent removal from the university. A student who is expelled is not eligible to return to a prior program of study nor to enter a new program of study.
- *Dismissal* refers to a permanent separation from a specific program of study or school. A student may apply to begin a different program of study and may or may not be admitted according to the standards and practices of that program or school.

Time Away and Reinstatement

Degree-seeking students may be eligible to request a leave of absence for health or other personal reasons (e.g., family, military service, professional obligations, religious mission). The mechanism and process are described on the Office of the University Registrar's website. Such leaves may exceed no more than two years from the effective date of the leave; individual programs' policies may limit

students to shorter leaves. Students must verify their school and program policies and any other relevant requirements related to immigration or financial aid/support policies. Students who have not requested and received approval for reinstatement after two years will have their records withdrawn.

Required enrollment reporting to the federal government will reflect a leave of absence for 180 days after it is enacted; any longer duration of institutional leave is recorded in their systems as a withdrawal.

Students on approved leave of absence will retain access to their Washington University email addresses, and to Workday to review their records. Access to other University privileges such as recreation facilities and libraries as well as participation in activities are paused during a leave of absence.

Students are expected to request reinstatement to in-progress status to resume studies via the process outlined on the Office of the University Registrar's website. Depending on the nature of their leave, additional steps or documentation may be required and must be provided to appropriately consider the request. Students whose records have been withdrawn as a result of two years of inactivity may be allowed, depending on program-specific policies regarding the maximum time allowed to complete the program of study, to request to re-enter their programs. In these cases, additional items may be required of the student depending on the circumstances, the length of time away, and whether their program of study has undergone curricular revisions since their enrollment.

Undergraduate Student Academic Integrity

Effective learning, teaching, and research all depend upon the ability of members of the academic community to trust one another and to trust the integrity of work that is submitted for academic credit or conducted in the wider arena of scholarly research.

Such an atmosphere of mutual trust fosters the free exchange of ideas and enables all members of the community to achieve their highest potential.

In all academic work, the ideas and contributions of others must be appropriately acknowledged, and the work of a student that is presented as original must be, in fact, original. Faculty, students, and administrative staff all share the responsibility of ensuring the honesty and fairness of the intellectual environment at Washington University in St. Louis.

Scope and Purpose

This statement on academic integrity applies to all undergraduate students at Washington University. Graduate students may be governed by policies in each graduate school or division. To the extent a graduate school or program has not adopted its own academic integrity policy, the provisions of this policy will apply. All students are expected to adhere to the highest standards of behavior.

The purpose of the statement is twofold:

1. To clarify the university's expectations with regard to undergraduate students' academic behavior; and
2. To provide specific examples of academic misconduct (the examples are only illustrative, *not* exhaustive).

This policy and statement were endorsed by the Faculty Senate Council. Any changes to the policy are to be reviewed by the Faculty Senate Council, as described in the Faculty Senate Council bylaws.

Violations of This Policy Include but Are Not Limited to the Following:

1. Plagiarism

Plagiarism consists of taking someone else's ideas, words or other types of work product, and presenting them as one's own. To avoid plagiarism, students are expected to be attentive to proper methods of documentation and acknowledgement. To avoid even the suspicion of plagiarism, a student must always:

- Enclose every quotation in quotation marks and acknowledge its source.
- Cite the source of every summary, paraphrase, abstraction or adaptation of material originally prepared by another person and any factual data that is not considered common knowledge. Include the name of author, title of work, publication information and page reference.
- Acknowledge material obtained from lectures, interviews or other oral communication by citing the source (name of the speaker, the occasion, the place and the date).
- Cite material from the internet or material generated by an artificial intelligence as if it were from a traditionally published source. Follow the citation style or requirements of the instructor for whom the work is produced.

2. Cheating on an Examination

A student must not receive or provide any unauthorized assistance on an examination. During an examination, a student may use only materials authorized by the faculty.

3. Copying or Collaborating on Assignments Without Permission

When a student submits work with their name on it, this is a written statement that credit for the work belongs to that student alone. If the work was a product of collaboration, each student is expected to clearly acknowledge in writing all persons or artificial intelligences who contributed to its completion.

Unless the instructor explicitly states otherwise, it is dishonest to collaborate with others when completing any assignment or test, performing laboratory experiments, writing and/or documenting computer programs, writing papers or reports, and completing problem sets.

If the instructor allows group work in some circumstances but not others, it is the student's responsibility to understand the degree of acceptable collaboration for each assignment and to ask for clarification if necessary.

To avoid cheating or unauthorized collaboration, a student should never:

- Use, copy, or paraphrase the results of another person's work or material generated by an artificial intelligence and represent that work as their own, regardless of the circumstances.
- Refer to, study from, or copy archival files (e.g., old tests, homework, solutions manuals, or backfiles) that were not approved by the instructor.
- Copy another's work or to permit another student to copy their work.
- Submit work as a collaborative effort if they did not contribute a fair share of the effort.

4. Fabrication or Falsification of Data or Records

It is dishonest to fabricate or falsify data in laboratory experiments, research papers, reports or in any other circumstances; to fabricate source material in a bibliography or "works cited" list; or to provide false information on a résumé or other document in connection with academic efforts. It is also dishonest to take data developed by someone else and present them as one's own.

Examples of falsification include:

- Altering information on any exam, problem set, or class assignment being submitted for a re-grade.
- Altering, omitting, or inventing laboratory data to submit as one's own findings. This includes copying laboratory data from another student to present as one's own; modifying data in a write-up; and providing data to another student to submit as their own.

5. Other Forms of Deceit, Dishonesty, or Inappropriate Conduct

Under no circumstances is it acceptable for a student to:

- Submit the same work, or essentially the same work, for more than one course without explicitly obtaining permission from all instructors. A student must disclose when a paper or project builds on work completed earlier in their academic career.
- Request an academic benefit based on false information or deception. This includes requesting an extension of time, a better grade or a recommendation from an instructor.
- Make any changes (including adding material or erasing material) on any test paper, problem set or class assignment being submitted for a re-grade.
- Willfully damage the efforts or work of other students.
- Steal, deface, or damage academic facilities or materials.
- Collaborate with other students planning or engaging in any form of academic misconduct.

- Submit any academic work under someone else's name other than their own. This includes but is not limited to sitting for another person's exam; both parties will be held responsible.
- Violate any rules or conditions of test-taking or other course assessment (e.g., bringing materials or devices into an exam room when disallowed).
- Engage in any other form of academic misconduct not covered here.

This list is not intended to be exhaustive. To seek clarification, students should ask the professor or teaching assistant for guidance.

Reporting Misconduct

Faculty Responsibility

Faculty and instructors are strongly encouraged to report incidents of student academic misconduct to the academic integrity coordinators in the Office of the Provost in a timely manner (normally within five business days of discovery) so that the incident may be handled fairly and consistently across schools and departments. Teaching assistants and assistants in instruction are expected to report instances of student misconduct to their supervising instructors. Faculty members are expected to respond to student concerns about academic integrity violations in their courses.

Student Responsibility

If a student observes others violating this policy, they are strongly encouraged to report the misconduct to the instructor, to seek advice from the academic integrity coordinator in the Office of the Provost, or to address the student(s) directly.

Exam Proctor Responsibility

Exam proctors are expected to report incidents of suspected student misconduct to the course instructor and/or the Disability Resources staff, if applicable.

Procedure

Jurisdiction

This policy covers all undergraduate students, regardless of their college of enrollment, as well as graduate and professional students whose schools and programs do not have a separate policy and procedure. Cases will be heard by a panel drawn from an Academic Integrity Board made up of faculty and students representing the undergraduate schools and participating graduate programs.

Student Rights and Responsibilities in a Hearing

A student accused of an academic integrity violation, whether by a professor, teaching/graduate assistant, academic integrity coordinator or student is entitled to:

- A presumption of non-responsibility unless and until a panel determines that, based upon the evidence, it is more likely than not that the student engaged in a violation of academic integrity under this policy.
- Request a mediation/facilitation session prior to a hearing.
- Review the written evidence in support of the charge.
- Ask relevant questions.
- Offer an explanation as to what occurred.
- Present relevant material that would cast doubt on the correctness of the charge.
- Determination of the validity of the charge by an unbiased and objective panel and generally without reference to any past record of misconduct.

When responding to a charge of an academic integrity violation, a student may:

- Deny the charges and request a hearing in front of an Academic Integrity Board panel.
- Admit the charges and request a hearing to determine recommended sanction(s).
- Admit the charges and accept the imposition of sanctions by the academic integrity coordinator without a committee hearing.
- Request a leave of absence from the university. The academic integrity matter must be resolved prior to re-enrollment. A notation will be placed on the student's transcript indicating there is an unresolved academic integrity matter pending.
- Request to withdraw permanently from the university with a transcript notation that there is an unresolved academic integrity matter pending.

A student has the following responsibilities in resolving the charge of academic misconduct:

- Admit or deny the charge. This will determine the course of action to be pursued.
- Provide truthful information regarding the charges. It is a student code violation to provide false information to the university or anyone acting on its behalf.

Sanctions

If Found *Not* in Violation of the Academic Integrity Policy

If the charges of academic misconduct are not proven, no record of the allegation will appear on the student's transcript.

If Found in Violation of the Academic Integrity Policy

If, after a hearing, a student is found responsible for violation of the academic integrity policy or if a student has admitted to the charges prior to a hearing, the academic integrity coordinator may impose sanctions, including but not limited to the following:

- Issue a formal written reprimand.
- Impose educational sanctions, such as completing a workshop on plagiarism or academic ethics.
- Recommend to the instructor that the student fail the assignment. (A grade is ultimately the prerogative of the instructor.)
- Recommend to the instructor that the student fail the course.
- Recommend to the instructor that the student receive a course grade penalty less severe than failure of the course.
- Place the student on disciplinary probation for a specified period of time or until defined conditions are met. The probation will be noted on the student's transcript and internal record while it is in force.
- Impose suspension or expulsion.

Additional educational sanctions may be imposed. This list is not intended to be exhaustive.

A hearing panel may also elect to refer their recommended sanctions to the SCB Chairperson for determination if, for example, the recommendation departs from their standard recommendations.

Withdrawing from the course will not prevent the academic integrity coordinator or hearing panel from adjudicating the case, imposing sanctions, or recommending grade penalties, including a failing grade in the course.

A copy of the sanction letter will be placed in the student's academic file and may be reported in accordance with the Policy on Reporting of Student Conduct Violations.

Appeals

If a student believes the panel did not conduct a fair hearing or if a student believes the sanction imposed is excessive (i.e., suspension or expulsion), they may seek an appeal within 14 days of the original decision. For cases in which the decision resulted in suspension or expulsion, the appellate officer will be the Vice Provost of Educational Initiatives or the Vice Provost for Graduate Education. For all other cases, the appellate officer will be the Chair of the Student Conduct Board. Appeals are governed by Section VI of the university Student Conduct Code.

Administrative Record-Keeping Responsibilities

It is the responsibility of the academic integrity coordinators to keep accurate, confidential records concerning academic integrity violations. When a student has been found responsible for an academic integrity violation, a letter summarizing the allegation, the outcome, and the sanction will be placed in the student's official conduct file and may be reported out in accordance with the Policy on Reporting of Student Conduct Violations.

In addition, a report of the outcome of every formal accusation of student academic misconduct will be shared with the director of university student conduct programs, who shall maintain a record of each incident.

Multiple Offenses

When a student is formally accused of academic misconduct and a hearing is to be held, the academic integrity coordinator shall query the Office of Student Conduct and Community Standards (OSCCS) about the student(s) accused of misconduct. OSCCS shall provide any information in the OSCCS records concerning prior code violations of that student to the integrity coordinator. Such information will be used in determining sanctions if the student is found responsible for an academic integrity violation in the present case. Evidence of past misconduct generally may not be used to resolve the issue of whether a student has committed a violation in a subsequent case unless the hearing chair deems it relevant.

Reports to Faculty and Student Body

Periodic (at least annual) reports will be made to the students and faculty of their school concerning accusations of academic misconduct and the outcomes, without disclosing specific information that would allow identification of the student(s) involved.

*Endorsed by the Faculty Senate Council on March 16, 2010
Effective July 1, 2010
Updated December 4, 2014*

*Endorsed by the Faculty Senate Council on October 18, 2023
Updated April 18, 2024*

University Affiliations

The accrediting organizations and memberships of the different areas of Washington University are listed below.

Additional information about professional and specialized accreditation can be found on the Office of the Provost website.

Washington University in St. Louis

Accreditation

- Higher Learning Commission

Memberships

- American Academy of Arts & Sciences
- American Association of Colleges & Universities
- American Council of Learned Societies
- American Council on Education
- Association of American Universities
- Hispanic Association of Colleges and Universities
- Independent Colleges and Universities of Missouri
- National Association of Independent Colleges and Universities
- National Council for State Authorization Reciprocity Agreements
- Universities Research Association

College of Arts & Sciences

Memberships

- American Academy of Physician Associates
- American Camp Association
- Association for Pre-College Program Directors
- Association of University Summer Sessions
- Diversity Abroad
- Forum on Education Abroad
- Higher Education Protection Network
- International Center for Academic Integrity
- International Educational Exchange
- Midwest Association of Pre-Law Advisors
- National Academic Advising Association
- National Association of Advisors for the Health Professions
- National Association of Fellowships Advisors
- North American Association of Summer Sessions
- Professional and Organizational Development Network

Office of Graduate Studies, Arts & Sciences

Accreditation — Office of Graduate Studies

- American Psychological Association Commission on Accreditation
- Psychological Clinical Science Accreditation System

Memberships

- American Academy of Physician Associates
- Association of Graduate Schools
(Founding member)
- Council of Graduate Schools
(Founding member)
- Midwest Association of Pre-Law Advisors
- Pod Network
- Student Affairs Administrators in Higher Education
- The Council of Independent Colleges

Sam Fox School of Design & Visual Arts

Accreditation — College of Art

- National Association of Schools of Art & Design
(Founding member)

Accreditation — College of Architecture

- Master of Architecture: National Architectural Accrediting Board
- Master of Landscape Architecture: Landscape Architectural Accreditation Board

Membership — College of Architecture

- Association of Collegiate Schools of Architecture

Accreditation — Mildred Lane Kemper Art Museum

- American Alliance of Museums

Membership — Mildred Lane Kemper Art Museum

- Association of Academic Museums and Galleries
- Association of Art Museum Directors
- College Art Association

Olin Business School

Accreditation

- Association to Advance Collegiate Schools of Business International
(Charter member since 1921)

McKelvey School of Engineering

Accreditation

- In the McKelvey School of Engineering, many of the undergraduate degree programs are accredited by the Engineering Accreditation Commission of ABET.

Membership

- American Society for Engineering Education

School of Law

Accreditation

- American Bar Association

Memberships

- American Association of Law Libraries
- American Society of Comparative Law
- American Society of International Law
- Association of Academic Support Educators
- Association of American Law Schools
- Central States Law Schools Association
- Clinical Legal Education Association
- Equal Justice Works
- Mid-America Association of Law Libraries
- Mid-America Law Library Consortium

- National Association for Law Placement
- National Association of Law Student Affairs Professionals
- Southeastern Association of Law Schools

School of Medicine

Accreditation

- American Speech-Language-Hearing Association, Council on Academic Accreditation in Audiology and Speech-Language Pathology (ASHA CAA)
- Association for Assessment and Accreditation of Laboratory Animal Care (AAALAC)
- Liaison Committee on Medical Education
- Council on Education of the Deaf (CED)
- Missouri Department of Elementary and Secondary Education (DESE)
- American Occupational Therapy Association, Accreditation Council for Occupational Therapy Education (ACOTE)
- American Physical Therapy Association, Commission on Accreditation in Physical Therapy Education (CAPTE)
- Accreditation Council for Genetic Counseling (ACGC)
- Accreditation Council for Continuing Medical Education (ACCME)
- Accreditation Council for Pharmacy Education (ACPE)
- American Nurses Credentialing Center (ANCC)
- Association of Regulatory Boards of Optometry's Council on Optometric Practitioner Education (ARBO/COPE)
- Joint Accreditation for Interprofessional Continuing Education
- Accreditation Council for Graduate Medical Education (ACGME)

Membership

- Association of American Medical Colleges

School of Public Health

Accreditation

- Council on Education for Public Health

Affiliation

- Association of Schools and Programs of Public Health

Brown School

Accreditation

- Council on Social Work Education



School of Continuing & Professional Studies

Memberships

- American Association of Collegiate Registrars and Admissions Officers
- Council for Adult and Experiential Learning
- International Center for Academic Integrity
- National Academic Advising Association
- National Association of Student Personnel Administrators
- University Professional and Continuing Education Association

Note: Business-related programs in the School of Continuing & Professional Studies are not accredited by the Association to Advance Collegiate Schools of Business International.

University Libraries

Membership

- Association of Research Libraries

Graduate Policies

Please expand the sections below for more information about WashU's graduate policies and guidelines.

Academic Load Status for Financial Aid, Immigration, and Enrollment Verification

Graduate (Fall, Spring)

Status	Enrolled Units of Credit
Full time	9+ units
Half time	4.5-8.99 units
Less than half time	Fewer than 4.5 units

Graduate (Summer)

Status	Enrolled Units of Credit
Full time	6+ units
Half time	3-5.99 units
Less than half time	Fewer than 3 units

Certain courses may, due to appropriate curriculum and monitoring circumstances, be encoded to carry a load value higher than the actual academic credit awarded. Examples include certain engineering co-op experiences, doctoral research study and select clinical or practicum courses.

Registration in Courses

Registration dates are published in advance on the Office of the University Registrar's website. Late registration after the term begins is permitted only until the "add/drop" deadline relevant to a student's program. Students will not earn credit for courses in which they are not duly registered. Students may not register in courses that have conflicting meeting times.

Students may drop a course by the published deadline found on the Office of the University Registrar's website; dropped courses do not appear on the permanent academic record, and no grade is recorded. Students may withdraw from a course after the drop deadline and until the published withdrawal deadline. A withdrawal will result in a W notation associated with the course on the permanent record, including the transcript. Students who wish to drop or withdraw from a course are expected to follow steps to do so by the appropriate deadline. Failure to drop a course or withdraw by the published deadline may result in a failure of the course, and the transcript will reflect the failing grade.

Transfer Credit

Transfer credit is recorded on a student's permanent record. Courses transferred from other institutions of higher education do not have grades or grade points awarded and therefore do not apply toward a student's GPA.

Institutionally, Washington University participates in the Inter-University Exchange Program. Courses taken at Saint Louis University and the University of Missouri–St. Louis, according to the parameters documented, are approved to transfer to Washington University. The School of Law has a specific agreement in place with Saint Louis University for JD students only and under certain circumstances. Other transfer credit policies vary by school and program. Details may be found in the relevant academic sections of this *Bulletin*.

Tuition and Cost of Attendance

The cost of a Washington University education varies by school and, in some cases, by program. Tuition rates and fees are available through the Office of Financial Planning and Budget and are typically listed in greater detail (including fees and financial support options and procedures) on school websites.

Withdrawals and Refunds

If a student withdraws from Washington University after classes have begun, they must promptly file a request to withdraw in order to have appropriate registration and refund policies apply. These timelines vary by school and, in some cases, by program. Students should refer to the appropriate sections of this *Bulletin* for details.

University PhD Policies & Requirements

Academic PhD Programs

The following university-wide policies and practices apply to all PhD students regardless of school affiliation. They are specific to PhD program administration and PhD student experience. Schools/divisions may set stricter standards for students within their ambit, but they may not set standards that fall below university-wide policies. This page *does not* include those policies and practices that apply to the student community as a whole (e.g., the University Student Conduct Code).

Academic and Professional Integrity for PhD Students

The Academic and Professional Integrity Policy for PhD Students (PDF) continues to apply to all PhD students on the Danforth and Medical campuses, including dual-degree students when one of the degree programs is a PhD program.

Involuntary Leave of Absence

The Involuntary Leave of Absence Policy that applies to undergraduates was adopted to apply to all PhD students in 2014.

PhD Student Support Policies and Resources

New Child Leave

Full-time PhD students may request a New Child Leave to assume care for a new child. They should maintain their full-time student status. Students on New Child Leave are not expected to participate in mentored teaching or research experience for up to 60 consecutive calendar days (8 weeks) and will receive their current stipend support during this 60-day period. Students may request additional time off via a leave of absence without receiving a stipend (for up to a full semester) if approved by the student's department/program.

New Child Leave does not affect the student's full-time status and will not appear on the student's official transcript. New Child Leave must be taken within the first year after the child's date of birth or adoption. Students should contact their department/program to request a New Child Leave. Students who receive support from external agencies should consult the policies and guidelines of the sponsor as well as their Vice Dean or designee before requesting a New Child Leave.

Child Daycare Subsidy

The Child Daycare Subsidy is sponsored by WashU, and its purpose is to help PhD students with children under their care (who meet the requisite eligibility criteria) to meet the costs of child daycare while they pursue their studies.

The amount of the Child Daycare Subsidy awarded to eligible applicants is based on their financial need, the number of children they have enrolled in child daycare facilities, their child daycare expenses, and available funding. Eligible PhD students can expect the following:

- For one child, the maximum award is \$3,550 per Fall/Spring semester.
- For two children, the maximum award is \$4,550 per Fall/Spring semester.
- For three or more children, the maximum award is \$5,550 per Fall/Spring semester.

The subsidy amount cannot exceed the cost of the daycare facility.

The application is available on the Office of the Provost website.

Financial Policies

PhD Student Minimum Financial Award

The education of PhD students represents a significant commitment on the part of both WashU and the students admitted/enrolled. WashU typically funds most full-time PhD students for a minimum of five years (with the exception of post-professional PhD programs in the School of Medicine). Funding typically consists of full tuition scholarship and financial support to defray living expenses. Financial support may also be referred to as stipends or fellowships. Such financial support may be sourced internally from university-wide fellowships such as the Olin Chancellor's Fellowship (OCF), the McDonnell International Scholars Academy (p. 153), or school/program/department funds or from external sources (e.g., external research contracts and grants, external fellowships such as NSF GRFP).

The minimum PhD financial support rate for the 2026-27 academic year is \$37,853 annually, dispersed on a monthly basis while the student is enrolled full time. The rate applies to all PhD programs with the exception of post-professional specialty programs in the School of Medicine. Departments, schools, cross-school interdisciplinary programs, and other fellowship programs may choose to offer a rate higher than the established minimum, but they must do so for all students in their cohort. The eligibility criteria for PhD students receiving such financial support are outlined in the PhD Student Funding section below.

Students admitted to a part-time PhD program or on a part-time basis are not eligible for this minimum financial award.

PhD Student Funding

Financial support at or above the university-wide PhD minimum stipend rate allows PhD students to focus on their programmatic requirements, enabling them to make expeditious progress toward degree completion. This section predominantly pertains to PhD students, but it may apply to other graduate and professional students receiving financial support from the university.

Eligibility and Status

Students receiving university financial support must do the following:

- Enroll and maintain full-time student status in a graduate or professional program during the academic year;
- Make satisfactory academic progress in accordance with their degree program requirements; and
- Report to their degree program and university fellowship program (if applicable) any additional financial award(s) they receive or employment they engage in as outlined in this policy.

Because graduate students sometimes receive funding from multiple sources, it is the responsibility of the student, the student's department/degree program, and the Principal Investigator (if applicable) to understand and abide by the terms and conditions of each funding source.

Funding From Multiple Sources

Eligible students are encouraged to seek additional fellowships from external agencies. In addition to the funding amount, which can be more generous than that of a university financial award, these external fellowships are prestigious; they provide valuable training, experiences, and resources, and they enhance future career opportunities. In addition, securing external funding to support training and research is often an important component of the professional development of graduate students.

PhD students receiving university financial support who also receive an external fellowship or stipendiary award *may not* combine or "stack" the external award with the university financial support.* Students receiving an external fellowship or stipendiary award have two options.

Option 1: Supplementation of an External Fellowship or Stipendiary Award

If the sum of all external fellowship or stipendiary awards is less than the university financial support, the university funds may supplement the total amount of external funding to bring the student up to their guaranteed university fellowship or to the minimum university financial support for PhD students.

Students who receive external fellowship or stipendiary awards providing annual stipends that total more than the university financial support will retain the full external award(s) and will receive no additional university financial support for the duration of the external award.

- *Example One:* A student has a university award of \$38,000. The student receives a \$34,000 external award; the university will supplement the external award by \$4,000 to bring the student up to their university award of \$38,000.
- *Example Two:* A student has a university award of \$38,000. The student receives an external foundation award of \$42,000. Since the external award is greater, no university funds will be distributed while the student is supported by the external award.

Option 2: Deferral of University Fellowship or Stipendiary Award

Students receiving an external fellowship or stipendiary award during years one through five of study may, with program approval, defer up to one year of the university fellowship or stipendiary award made at the time of admission, if permissible based upon the award criteria from the external funding agency.

The university fellowship program and/or the student's home department or program can assist students when considering the benefits of each option. For cases in which a student has access to multiple sources of funding, external funds must be used before university funds are applied. University, school, and degree program funds will be the last source of funds to be applied to a student's financial support.

Schools and departments/programs may choose to offer an additional financial incentive to students who are awarded competitive external funding. Any such incentives must be uniformly awarded to all qualifying students within a degree program. Incentive awards given by school or degree programs to students who win external awards do not count toward the total university financial support; these incentive awards are in addition to the fellowship or stipendiary award.

All financial support will be applied in accordance with the terms and conditions of each funding source. In consultation with the student, departments/programs should ensure financial support is dispersed in the correct amount and in accordance with applicable policy.

* Limited exceptions may occur for instances in which the external award is explicitly contingent on the continuation of the university stipendiary award. In such instances, the decision on stacking is at the discretion of the school dean or their designee for support provided by the school or by a cross-school interdisciplinary program and at the discretion of the fellowship administrator for university-wide fellowships (e.g., OCF, MISA).

PhD Student Employment

Full-Time Employment

University financial support that is provided at or above the university-wide PhD minimum stipend rate is intended to enable students to focus exclusively (i.e., full time) on their studies. Students who receive university financial support at or above the university-wide minimum PhD stipend rate are not permitted to hold full-time employment.

Students who perform full-time employment during the summer term will have their university fellowship or stipendiary award stopped for the duration of their full-time employment. Students are also subject to any school or program-based policies regarding employment, which may be more restrictive. Students should consult their school and degree program for approval.

Part-Time Employment

To ensure that students receiving university financial support can focus on their programmatic requirements and make expeditious progress toward degree completion, part-time employment should not exceed an average of 10 hours per week. This allowance may be restricted by schools/departments/programs to a smaller number of hours per week to conform with a student's funding source policies and with federal time and effort reporting guidelines (as applicable).

If a student and that student's advisor(s) believe that additional part-time employment will enhance the student's outcomes and is unlikely to hinder timely progress toward degree completion, the student may request approval for an exception through their school's graduate program office. Any such exceptions will be documented and kept on file in the school. For students supported on federal grants, it is the school's responsibility to ensure adherence to any constraints derived from time and effort reporting.

To reiterate, students are also subject to any school or department/program-based policies regarding employment, which may be more restrictive. Students should consult their school and degree program for approval prior to undertaking any part-time employment.

Implications for International Students

International students attending WashU on a visa must consult with the Office for International Students and Scholars (OISS) before accepting any external or internal employment, either full-time or part-time.

Tax Implications

Please visit WashU's Financial Services website for more information about the taxability of stipend payments. Students are encouraged to consult a personal tax advisor to ensure that they are adhering to federal and state laws and Internal Revenue Service (IRS) regulations.

PhD General Requirements and Policies

To earn a PhD at WashU, a student must complete all courses required by their department/program; maintain satisfactory academic progress; pass certain examinations; fulfill residence and mentored experience requirements; write, defend, and submit a dissertation; and file an Intent to Graduate in Workday Student. **Note:** Individual schools and departments/programs may have more restrictive policies than the university-wide policies stated herein.

Residence Requirement

Each full-time PhD student must spend at least one academic year enrolled full-time at Washington University in St. Louis. Any exceptions must be approved by the dean of the student's respective school and the Vice Provost for Graduate Education.

Students admitted to a part-time PhD program must be enrolled in at least 3 units for each Fall/Spring semester until the unit requirements for their program are satisfied

Time Limit for PhD Enrollment Eligibility

Full-time PhD students are eligible for enrollment at Washington University in St. Louis for a maximum of 14 Fall/Spring semesters (seven years). Enrollment includes traditional course registration and 0-unit courses that carry a full-time enrollment status. Semesters of approved leaves of absence do not count toward this time limit.

Students admitted to a part-time PhD program are eligible for enrollment at Washington University in St. Louis for 18 Fall/Spring semesters (nine years). Semesters of approved leaves of absence do not count toward this time limit.

Full-time PhD students and those admitted to part-time PhD programs may petition for an enrollment eligibility extension for a maximum of one academic year. Petitions must be directed to the student's dean or their designee. Supplemental petitions will not be permitted. In unusual circumstances, the dean or their designee may appeal to the Vice Provost for Graduate Education on behalf of a particular student.

Qualifying Examinations

Progress toward the PhD is contingent upon the student passing examinations that are variously called *preliminary*, *qualifying*, *general*, *comprehensive*, or *major field exams*. The qualifying examination process varies considerably according to the department/program, and the structure and schedule of the qualifying exam are set by the department/program in accordance with best practices within their field. The department/program is responsible for documenting the process properly and ensuring the process is clearly outlined to their students. Each PhD program is responsible for notifying the school registrar or the appropriate record custodian of the student's outcome, whether successful or unsuccessful.

Mentored Experience Requirement

As part of the university-wide degree requirements, PhD students and some master's students (i.e., MFA in Writing and MFA in Dance) at WashU must complete a department-/program-defined Mentored Experience Requirement (MER). The MER is an accomplishment that is noted on the student's academic record when complete. Each department/program established a Mentored Experience Implementation Plan (MEIP) in which required MER units and pathways for completion are defined and specified. The MEIP typically consists of Mentored Teaching Experiences (mentored activities designed to achieve competencies in teaching at basic and advanced levels) and/or Mentored Professional Experiences (mentored activities focused on the development of skills relevant to individual, intended career and professional outcomes). Students enroll in Mentored Teaching Experience courses and/or Mentored Professional Experience courses to signify progression toward completing the MER.

Dissertation

As evidence of the mastery of a specific field of knowledge and of the capacity for original scholarly work, each candidate must complete a dissertation. Each PhD candidate will form a Research Advisory Committee (RAC) approved by their department/program and by their school's graduate program oversight body. The RAC will approve the subject and approach of the dissertation, which will be evidenced by the student's completion of the Title, Scope and Procedure requirement.

The RAC should consist of at least three full-time Washington University in St. Louis faculty members who are authorized to supervise PhD students and who have appropriate expertise in the proposed field of study. One of these faculty members must be the student's primary research advisor/mentor. Additional members, including external members with active research programs at outside institutions, may serve on the RAC subject to approval by the school's graduate program oversight body.

- For cross-school/interdisciplinary PhD programs, the approvals referenced above should be obtained from the graduate program oversight body of the school of the primary research advisor/mentor.
- For a PhD program offered in partnership with an external academic institution, one full-time faculty member of the partner institution who is authorized to supervise PhD students and who has appropriate expertise in the proposed field of study may serve on the RAC as part of the three-member minimum requirement.

A Title, Scope and Procedure form for the dissertation must be signed by the RAC members and by the program chair. Full-time students must submit the Title, Scope and Procedure form to the school registrar or the appropriate record custodian at least six months before the degree is expected to be conferred or before the beginning of the fifth year of full-time enrollment, whichever is earlier. Students enrolled in a part-time PhD program must submit the Title, Scope

and Procedure form to the school registrar or the appropriate record custodian at least six months before the degree is expected to be conferred or before the beginning of the sixth year of enrollment, whichever is earlier.

A Doctoral Dissertation Guide and a template that provides instructions regarding the format of the dissertation are available through the website of the Office of the Provost; both of these should be read carefully at every stage of dissertation preparation.

Each student is required to make the full text of the dissertation available to the committee members for their review at least one week before the dissertation defense. Most degree programs require two or more weeks for the review period; students should check their department/program's policies.

Dissertation Defense

Approval of the written dissertation by the Research Advisory Committee (RAC) is strongly recommended before the student can orally defend the dissertation. The doctoral dissertation committee that examines the student during the defense consists of at least five members. Normally, the members of the RAC also serve on the Doctoral Dissertation Committee. The dissertation committee is then additionally augmented to ensure that the following criteria are met:

1. Three of the five members (or a similar proportion of a larger committee) must be full-time Washington University in St. Louis faculty members or, for programs offered by Washington University in St. Louis-affiliated partners, full-time members of a Washington University in St. Louis-affiliated partner institution who are authorized to supervise PhD students and who have appropriate expertise in the proposed field of study. One of these three members must be the PhD student's primary thesis advisor, and one may be a member of the emeritus faculty.
2. All other committee members must be active in research/scholarship and have appropriate expertise in the proposed field of study whether at Washington University in St. Louis, at another university, in government, or in industry.
3. At least one of the five members must bring expertise outside of the student's field of study to the committee, as judged by the relevant school's graduate program oversight body.

The approval processes outlined under RAC in the Doctoral Council bylaws also apply to the doctoral dissertation committee, including approval of each dissertation committee by the host school's graduate program oversight body/bodies.

The student is responsible for making the full text of the dissertation accessible to their committee members for their review in advance of the defense according to program rules. Washington University in St. Louis community members and guests of the student who are interested in the subject of the dissertation are normally welcome to attend all or part of the defense but may ask questions only at the discretion of the committee chair. Although there is some variation among degree programs, the defense ordinarily focuses on the dissertation itself and its relation to the student's field of expertise.

Attendance by a minimum of four members of the Doctoral Dissertation Committee, including the committee chair and an outside member, is required for the defense to take place. This provision is designed to permit the student's defense to proceed in case of a situation that unexpectedly prevents one of the five members from attending. Students should not plan in advance to only have four members in attendance; if one of those four cannot attend, the defense must be rescheduled. The absence of all outside members or of the committee chair would necessitate rescheduling the defense.

Students, with the support of their Doctoral Dissertation Committee chair, may opt to hold their dissertation defense in-person or by utilizing a virtual or hybrid format.

Dissenting Vote(s) at a Dissertation

Faculty members of the Doctoral Dissertation Committee normally will examine the PhD candidate and vote on whether to approve the dissertation. In the vast majority of cases, these votes are unanimously for approval. In the rare case that there are faculty concerns that cannot be resolved through subsequent revisions and which therefore result in dissenting (negative) vote(s), the committee chair will refer the case to the Vice Provost for Graduate Education for resolution.

In the case of a single dissenting vote, the committee chair and the dissenting voter will be asked to explain the reasons for the dissent in a letter to the Vice Provost for Graduate Education. After consulting with these and other members of the committee, the Vice Provost for Graduate Education may then decide to accept the majority opinion and approve the dissertation, or they may seek the opinion of an additional reader. After considering this additional evidence, the Vice Provost for Graduate Education may approve or decline to approve the dissertation.

In the case of two or more dissenting votes, the committee chair and the dissenting voters will again be asked to explain the reasons for the dissent. The Vice Provost for Graduate Education may then decide to decline to approve the dissertation. Alternatively, they may ask the department or graduate program to name a Resolution Committee, consisting of three tenured or tenure-track professors at Washington University in St. Louis or elsewhere who did not serve on the original committee, to reexamine the dissertation and the candidate. A unanimous positive recommendation from this committee will be required in order for the Vice Provost for Graduate Education to approve the dissertation. Failure of a department or graduate program to identify three faculty members to serve on this Resolution Committee will be tantamount to a rejection of the dissertation.

Dissertation Submission

After the successful defense of their dissertation, the student must submit an electronic copy of the dissertation online to the university by the established deadline for their graduation term. Dissertations must be submitted no later than three months after the oral defense of the dissertation. Petitions for an extension to the three-month limit may be submitted to the Director of Graduate Studies for consideration and approval. The submission website requires students

to choose from among publishing and copyrighting services offered by ProQuest ETD Administrator, but the university permits students to make whichever choices they prefer. Washington University in St. Louis doctoral students may initially request to embargo the public release of their dissertation for a specified period of six months, one year, or two years. Renewals beyond the initial embargo may be granted by the Vice Provost for Graduate Education. Students are asked to submit the Survey of Earned Doctorates separately. The degree program is responsible for delivering the final approval form, signed by the committee members at the defense and then by the department/program chair or director, to the school registrar or the appropriate record custodian. Students who complete all degree requirements and defend their dissertations successfully have not completed their PhD requirements; they finish earning their degree only when their dissertation submission has been accepted by their school of record.

Degree Candidacy Extension

Degree Candidacy Extension (DCE) refers to a non-enrolled status available, under exceptional circumstances, to full-time PhD students who have completed all PhD degree requirements with the exception of the dissertation.

Extended degree candidates are not registered for any courses, have no enrollment status, and are ineligible for financial awards or support, benefits, and resources available to enrolled Washington University in St. Louis students. Once a student enters DCE, they may not register or enroll with Washington University in St. Louis as a student in their intended degree program in a future term.

DCE status may be assigned to full-time students in a variety of situations, including but not limited to the following:

- PhD students who do not complete their dissertation after exhausting the time allowable for PhD enrollment status due to circumstances beyond their control (see Time Limit for PhD Enrollment Eligibility earlier on this page);
- PhD students who secure full-time employment prior to the completion of their dissertation and who have established a timeline for the completion of the dissertation requirement; and
- PhD students who have exhausted their university financial support period as defined by their school or program prior to the completion of their dissertation and who have established a time line for the completion of the dissertation requirement.

DCE status may be inappropriate for international students dependent on a U.S. visa, and such students may not be eligible for this status. International students should always consult with an OISS advisor prior to making an enrollment status change. In addition, students admitted as part-time PhD students are not eligible for DCE status.

DCE status is not the rule. Rather, it is assigned as an exception. Students must obtain the recommendation of their department/program leadership and petition the Vice Dean for Graduate Education (or equivalent) within their school to request to enter DCE status. If the petition is successful, the DCE status is conferred for the period of one year, after which an additional petition should be made and approved. Students seeking to remain in DCE status are obligated to provide a written report on their dissertation's progress annually to

their department to secure their approval for subsequent petitions. Individual departments may require additional checkpoints to ensure progression. Students may remain a PhD candidate in this status for a maximum of three calendar years.

If three calendar years pass from the first semester in which a student was placed on DCE and the student has not successfully completed all degree requirements, then that student has officially forfeited their eligibility to earn the PhD degree. Under these circumstances, the student may petition the Vice Provost of Graduate Education with the support of their department chair and school vice dean to be allowed to complete the degree outside of the three-year extension period. The petition will include a timeline for completion. The Vice Provost of Graduate Education reserves the right to deny any such request.

PhD Mentored Experiences

The Mentored Experience Requirement (MER)

As part of the university-wide degree requirements, PhD students and students in certain master's programs (i.e., MFA in Writing and MFA in Dance) at Washington University in St. Louis must complete a program-defined Mentored Experience Requirement (MER). The MER is an accomplishment that is noted on the student's academic record when complete. Each program established a Mentored Experience Implementation Plan (MEIP) in which required MER units and pathways for completion are defined and specified. The MEIP typically consists of Mentored Teaching Experiences (mentored activities designed to achieve competencies in teaching at basic and advanced levels) and/or Mentored Professional Experiences (mentored activities focused on the development of skills relevant to individual, intended career, and professional outcomes). Students enroll in Mentored Teaching Experience (MTE) courses and/or Mentored Professional Experience (MPE) courses to signify progression toward completing their MER.

Mentored Experience Implementation Plan (MEIP)

An MEIP is a program-defined plan for students to complete their MER and engage in mentored teaching activities and/or mentored professional activities. MEIPs include the philosophy related to the role of teaching or professional experiences within the discipline, the program's plan for preparatory engagement, the normal sequence of opportunities for a student, and the number of MER units required. Each of these terms are defined within this section.

MEIPs were updated by programs during the 2024-25 academic year, and new plans are available under each program's "Mentored Experience Implementation Plan" tab in the *Bulletin*. Plans were effective as of Fall 2025 and applied to all students who had not yet completed their MER. Any revised plans in this Bulletin would be effective for students entering their program in Fall 2026.

Preparatory Engagement

Preparatory Engagement activities represent an introduction to the foundational skills associated with teaching or communication. Preparatory Engagement represents an important foundational component to training in pedagogy. As such, all MEIPs contain required pedagogical preparation before students are permitted to engage in assisting or teaching in a classroom.

Mentored Teaching Experiences (MTEs)

An MTE represents a collaborative engagement between a student and a faculty mentor wherein the student reflects on and interprets disciplinary knowledge; identifies multiple ways to represent disciplinary content; adapts content to students' abilities and prior knowledge; and develops methods to assess and improve the teaching and learning process in a discipline. A student engaged in an MTE will have an assigned faculty mentor supporting the student's development into an educator able to communicate and/or evaluate disciplinary knowledge.

Two categories of MTE exist at WashU: Assistantships in Instruction (AI) and Mentored Independent Teaching (MIT). Each MTE engagement is weighted by MER units to recognize the different levels of effort involved.

Assistant in Instruction (AI)

An AI experience is one in which the student is directly engaged in the organization, instruction, and/or support of a semester-long course *primarily taught by a faculty member*. During the AI, the student receives mentorship from the faculty member in best practices in classroom engagement, instruction in the field, interpersonal engagement, and other relevant skills. Students receive regular informal feedback or evaluation from the mentor throughout the semester, as well as a final evaluation from the mentor and course evaluations from students enrolled in the course as part of the normal course evaluation process.

The student is formally listed as instructional support via Workday in the course listings. In general, AI assignments connect to undergraduate courses or to lower-level graduate courses that the student has taken previously.

MER units for AI experiences are determined by the program based on the level of activity needed for each assignment:

- 5 MER units are equivalent to an average of 5 hours per week of engagement; students enroll in their program's course numbered 8005 during the semester of engagement.
- 10 MER units are equivalent to an average of 10 hours per week of engagement; students enroll in their program's course numbered 8010 during the semester of engagement.
- 15 MER units are equivalent to an average of 15 hours per week of engagement; students enroll in their program's course numbered 8015 during the semester of engagement.

Mentored Independent Teaching (MIT)

An MIT is a semester-long experience for students who engage as the primary instructor or co-instructor of a course *under the mentorship of a faculty member* as part of their MER. Throughout the semester, students receive regular feedback from a faculty mentor based on classroom observation conducted a few times per semester or other acceptable review mechanisms. The student should ask for guidance and support from the faculty mentor while navigating the responsibilities of independent teaching. Faculty mentors are also required to complete the final evaluation for the student.

An MIT experience may not be a requirement or option under every program's MEIP. Each MIT engagement will equate to 20 MER units. The 20 MER unit assignment accounts for the considerable level of preparation and consultation each PhD student needs to engage in as part of this introductory experience toward acquiring the skills required for independent teaching. Students enroll for the semester of engagement under their program's course numbered 8020.

Mentored Professional Experiences (MPEs)

MPEs are unpaid experiences that allow students to develop skills and experiences relevant to their intended career outcomes. These experiences could include, for example, opportunities in industry, communication and outreach, government or policy, consulting, or higher education administration. The duties and responsibilities of the MPE should be intellectually substantive and offer opportunities for the student to develop new skills and experiences.

An MPE experience may not be a requirement or option under every program's MEIP. Each MPE engagement will equate to 20 MER units. The 20 MER unit assignment accounts for the considerable level of preparation and time needed for this engagement. An MPE should involve at least 150 hours (and not more than 180 hours) per engagement. Students enroll for the semester of engagement under their program's course 8120.

Optional MER Activities

Some programs allow for students to participate in additional, optional MTE or MPE engagements. If allowed, the program's MEIP will list the requirements for a Teaching Intensive Pathway (TIP) or a Professional Intensive Pathway (PIP).

Teaching Intensive Pathway (TIP)

The TIP is an optional pathway for those students whose career interests lie in academia or another field that would benefit from extended MTEs. This immersive experience allows students to further explore the breadth and depth of teaching best practices and pedagogy related to their respective field.

Students who are interested in participating in this elective experience must formally request to participate, which is subject to program approval. Due to this experience being an elective, unpaid experience, students who participate in the TIP will not receive compensation.

Professional Intensive Pathway (PIP)

The PIP is an optional pathway for those students whose career interests lie outside of academia or want to benefit from MPEs. An MPE is an unpaid professional experience for PhD students that allows students to develop skills and experiences relevant to their intended career outcomes. Students and mentors complete a mentorship plan prior to the start of each MPE. Students who are interested in participating in this elective experience must formally request to participate, which is subject to program approval. Similar to normal MPE experiences, students who participate in the PIP do not receive compensation associated with their MPE.

Post-MER Completion Teaching Activities

To be eligible to participate in an additional teaching activity at WashU, students must complete their MER as defined by their program's MEIP prior to undertaking optional elective instructional activity. Any independent teaching for pay that occurs after the completion of the MER must meet the spirit of the part-time employment policy or otherwise students must request an exception.

Instructional Support

At the completion of the student's MER as defined in the MEIP, students may elect to pursue additional instructional opportunities at WashU as a non-MTE AI or a similarly situated role. These additional opportunities are subject to the approval of their primary advisor and their department/program as well as the existence of such a position. These students will be paid an hourly rate.

Instructor or Co-Instructor of Record

At the completion of a student's MER requirements as defined in the MEIP, the student may elect to pursue instructor opportunities at WashU as an independent instructor. These opportunities are subject to the approval of the student's primary advisor and their department/program as well as the existence of such a position. Students who have completed their MERs must demonstrate the requisite experience and training in pedagogy to engage in teaching at the fully independent level. These students are eligible for compensation in accordance with the adjunct professor collective bargaining agreement.

Current MEIPs

Arts & Sciences

- Anthropology, PhD, Archeology Concentration
- Anthropology, PhD, Biological Anthropology Concentration
- Anthropology, PhD, Sociocultural Anthropology Concentration
- Art History & Archaeology, PhD
- Chemistry, PhD
- Classics, PhD
- Comparative Literature, PhD
- Dance, MFA
- Earth, Environmental, and Planetary Sciences, PhD
- East Asian Languages and Cultures, PhD
- Ecology and Evolutionary Biology, PhD
- Economics, PhD
- Education, PhD
- English and American Literature, PhD
- English and Comparative Literature, PhD
- French and Francophone Studies and Comparative Literature, PhD
- French and Francophone Studies, PhD
- German and Comparative Literature, PhD
- Germanic Languages and Literatures, PhD
- Hispanic Studies and Comparative Literature, PhD
- Hispanic Studies, PhD
- History, PhD
- Mathematics, PhD
- Music, PhD, Music Theory Concentration
- Music, PhD, Musicology Concentration
- Philosophy, PhD
- Philosophy-Neuroscience-Psychology, PhD
- Physics, PhD
- Political Science, PhD
- Psychological & Brain Sciences, PhD
- Sociology, PhD
- Statistics and Data Sciences, PhD
- Writing, MFA

Business

- PhD Program

Engineering

- Biomedical Engineering PhD
- Biomedical Engineering PhD-MD
- Computational & Data Sciences, PhD
- Computer Engineering, PhD

- Computer Science, PhD
- Electrical Engineering, PhD
- Energy, Environmental, & Chemical Engineering, PhD
- Imaging Science, PhD
- Materials Science & Engineering, Interdisciplinary PhD
- Mechanical Engineering, PhD
- Systems Science & Mathematics, PhD

Medicine

- Division of Biology & Biomedical Sciences Programs
 - Biochemistry, Biophysics & Structural Biology, PhD
 - Biomedical Informatics & Data Science, PhD
 - Cancer Biology, PhD
 - Computational & Systems Biology, PhD
 - Developmental, Regenerative, & Stem Cell Biology, PhD
 - Immunology, PhD
 - Molecular Cell Biology, PhD
 - Molecular Genetics & Genomics, PhD
 - Molecular Microbiology & Microbial Pathogenesis, PhD
 - Neurosciences, PhD
 - Plant & Microbial Biosciences, PhD
- Medical Physics, PhD
- Movement Science, PhD
- Nursing Science, PhD
- Rehabilitation and Participation Science, PhD
- Speech and Hearing Sciences, PhD

Public Health

- Public Health Sciences, PhD (p. 88)

Brown School

- Social Work, PhD

Additional information including forms, resources, and FAQs are available on the Mentored Experiences page of the Office of the Provost website.

Bursky School of Public Health

Our Vision

To ensure all can live healthier, fulfilling lives.

Our Mission

To promote health and well-being through excellence in interdisciplinary population health science and scholarship, distinction in education, and a deep commitment to local and global impact.

Our Values

Bursky School of Public Health is committed to excellence, diligence, compassion, and integrity. We aspire to be an optimistic, inclusive, collaborative community with a sustained focus on advancing our shared mission.

Bursky School of Public Health

One Brookings Drive
St. Louis, MO 63130
314-935-4747

For more information, visit the Bursky School of Public Health website.

Faculty

Dean

Sandro Galea, MD, DrPH

Margaret C. Ryan Dean of the School of Public Health
Eugene S. and Constance Kahn Distinguished Professor in Public Health
Vice Provost for Interdisciplinary Initiatives

For more information, please visit the School of Public Health's Leadership & Governance and Faculty webpages.

Courses

Courses include the following:

- PHCC (p. 40): Public Health Concentration Courses
- PHDC (p. 42): Public Health Doctoral
- PHEL (p. 43): Public Health Electives
- PHFN (p. 46): Public Health Foundation
- PHPC (p. 46): Public Health Practicum
- PHRS (p. 47): Public Health Research
- PHS (p. 47): Population Health Sciences
- PHSL (p. 48): Public Health Skill Lab

- PHTPS (p. 51): Public Health Transdisciplinary Problem Solving
- PSYCH (p. 54): Psychological & Brain Sciences
- SWPM (p. 54): Social Work Practice Methods
- SWSP (p. 55): Social Work Social Policy
- SWTH (p. 55): Social Work Theory

Public Health Concentration Courses

PHCC 6000 Epidemiology Methods

This course extends the concepts and methods of epidemiology from PHFN 5000 Epidemiology, providing an in-depth exploration of concepts and skills in epidemiologic research, including analytic reasoning and study design, execution, data analysis and interpretation. Credit 3 units.

Typical periods offered: Spring

PHCC 6001 Foundations of Geographic Information Systems (GIS) for the Applied Social Sciences

This course will familiarize students with the basic knowledge of geographic information systems (GIS) and their application to social work practice and research. The course is organized around three primary areas: 1) conceptual; 2) technical; and 3) data management. A conceptual overview of GIS is presented to provide students with foundational knowledge about the theory, purpose, function, and applicability of GIS in practice and research settings. Students will develop critical thinking skills necessary to devise research questions appropriate for a GIS, to develop a GIS, interpret the findings, and to evaluate the spatial relationships between variables.

Credit 3 units.

Typical periods offered: Fall, Spring

PHCC 6002 Global Health

This course provides an overview of issues in international health, with a particular emphasis on those affecting health in low-income countries. It will cover the infectious diseases of malaria, tuberculosis, HIV/AIDS, acute respiratory infections, diarrheal diseases, and neglected tropical diseases (e.g. helminth infection). Chronic diseases and risk factors will also be addressed. An overview of the biology, epidemiology, and intervention evidence base will be covered, drawing from the Disease Control Priorities Project.

Credit 3 units.

Typical periods offered: Fall

PHCC 6003 Policy, Politics & Power in Global Health

The course will introduce students to the role of power and politics in global health and provide them with analytical tools to critically examine this field. It will review key debates, issues, concepts, theories and case studies linked to current major health and development issues, highlighting their relationship to health. It is based on a multidisciplinary approach to analysis of these issues.

Credit 3 units.

Typical periods offered: Spring

PHCC 6004 Health Economics

In this course, students will learn how to apply economic tools to the study of health and medical care issues. The course will examine the special features of medical care markets, the demand for health and medical care services, the economic explanations for the behavior of medical care providers (i.e., physicians and hospitals), the functioning of insurance markets, cost and comparative effectiveness, the economics of public health, and technology diffusion. Also examined will be the role of, and economic justification for, government involvement in the medical care system. The tools developed in the course will be used in discussions of current policy topics such as health reform, insurance reform, incentives for health behavior, rationing, and price regulation.

Credit 3 units.

Typical periods offered: Spring

PHCC 6005 Quantitative Methods for Health Policy Analysis

This course will introduce students to additional methods and topics in economic evaluation of health (health care and public health) and health services research (HSR). Students will learn the differences, strengths, and weaknesses of different approaches at a user level. Students will produce a project in which they focus on either the economic evaluation or HSR side to evaluate public health policies or problems.

Credit 3 units.

Typical periods offered: Fall, Spring

PHCC 6006 Health, Politics & Policy

Health, Politics, and Policy: This course focuses on how public policies are actually made in the United States, and, in particular, health policies. The course is designed to introduce students to the literature, concepts, theories, and politics of the policy process and methods for analyzing this process. The emphasis in the readings will be on different concepts for studying the policy process and analyses. This course will focus on concepts related to policy processes including policymaking and politics.

Credit 3 units.

Typical periods offered: Spring

PHCC 6007 Fundamentals of Mental Health for Public Health

This course will provide an overview of the diagnosis and treatment of mental illness and other behavioral disorders for students who intend to work in the field of public mental health in a nonclinical capacity. Discussions of diagnosis will outline the main clinical and public health features of each category of mental illness, including clinical presentation, the course and prognosis of illness, and basic epidemiology. Discussions of available treatments will provide theoretical and practical examples of common medical and individual/group psychosocial interventions. The last hour of each class will take the format of a class discussion focusing on a critical examination of historical and contemporary issues pertaining to public mental health.

Credit 3 units.

Typical periods offered: Fall

PHCC 6008 Public Mental Health

This course will provide an overview of public mental health: the application of public health methods to the prevention and control of mental illness and substance use disorders and the promotion of mental well-being in populations. Although the course will focus primarily on the United States, public mental health will be also examined from a global perspective. Topics covered will include the distribution and determinants of mental and behavioral health problems, the prevention of mental and behavioral health problems and the promotion of mental well-being, and mental and behavioral health policy and services.

Credit 3 units.

Typical periods offered: Spring

PHCC 6009 Advanced Data Analysis

Students will be provided with an introduction to theory and analytical techniques commonly employed in the practice of public health data analysis through short lectures and a hands-on experiential learning approach. Students will develop and conduct an independent data analysis project, choosing from different real-world public health datasets that are amenable to some of the most common types of analyses that students will encounter in their public health careers. Lectures will address theory and practical tools. Exercises will be focused on application of the theories and tools. Lab assignments will provide students with a further opportunity to gain competency in strategies that can be employed to analyze each type of dataset. The course will also provide students with the opportunity to gain skills in data visualization strategies, conducting reproducible research, presenting projects, and effectively responding to constructive critiques. Priority given to those whose concentration is Epi/Bio.

Credit 3 units.

Typical periods offered: Fall, Spring

PHCC 6010 CPH Exam

The Certified Public Health (CPH) exam covers the areas of knowledge relevant to contemporary public health and general principles. A passing grade is required. This course is only required for students who matriculated into the MPH degree program between Fall 2019 and Fall 2024.

Credit 0 units.

Typical periods offered: Fall, Spring

PHCC 6011 Capstone I

The purpose of Capstone I is to prepare students for their independent integrated learning experience or capstone project. The capstone project is a student-initiated project that integrates and synthesizes selected MPH foundational and specialization competencies in a high-quality written product that demonstrates student mastery of such competencies. Capstone I aims to prepare students for the development of their capstone project by providing capstone guidelines, direction in competency selection, workshops and practice in scientific writing, proposal/outline development, and small group presentations and feedback on project ideas. This one-credit course is required of all MPH students before completion of their capstone project.

Credit 1 unit.

Typical periods offered: Fall, Spring

PHCC 6012 Capstone II

The purpose of Capstone II is for students to draft and finalize the capstone project proposed during Capstone I. Students will work independently and have regular progress meetings with the faculty instructor for their course section. Upon completion of their capstone projects, students will also perform a self-learning reflection by completing an MPH competency self-assessment.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHCC 6013 People, Health & Place: International Perspectives on Urban Health, Physical Activity, Urban Design, and Transportation

This course explores the intricate relationships between public health, urban design, transportation, and physical activity, emphasizing the comparative analysis of cities in Brazil and the United States. By applying the "necessity versus choice" model, students will critically

assess how the built environment influences opportunities for active living—whether driven by necessity (e.g., transportation to work, labor demands) or by choice (e.g., leisure-time activities, recreation). The course will uncover how structural bias, social inequities, and urban policies contribute to disparities in access to physical activity and health outcomes in diverse cultural contexts.

Credit 3 units.

Typical periods offered: Fall

Public Health Doctoral

PHDC 8007 Social Network Analysis

Social Network Analysis is an advanced graduate seminar covering social network analysis methods, with an emphasis on using network analysis tools to model social and health science relational and systems data. Network analysis techniques have become more widely used in recent years to study important areas such as the spread of infectious diseases (e.g., AIDS), the structure of the Internet and other complex information systems, the organization of terrorist networks, peer and family influences on smoking and obesity, referral patterns in social service systems, the diffusion of innovations, and the structure of governmental policy systems. The class will cover the historical and conceptual foundations of network analysis, but will emphasize a hands-on approach to exploring network data and learning to use professional network analysis tools. Specific topics include background and history of network analysis; network theories; network data collection and management; network visualization; network measures of centrality, cohesion, and structural equivalence; statistical modeling of networks; and longitudinal network analysis.

Credit 3 units.

Typical periods offered: Spring

PHDC 8014 Theoretical Orientations in Public Health Sciences

The primary goal of Theoretical Orientations in Public Health Sciences is to provide an in-depth exploration of the major theoretical traditions and approaches used in the public health sciences. The class will cover the historical development of important public health theories, as well as current theoretical developments and challenges. Students will also engage with a number of class exercises and assignments that will introduce them to how theories are developed, applied, and tested in public health research contexts. The theoretical coverage emphasizes a 'cells-to-society' approach, and will include assessments of biological, medical, epidemiologic, behavioral, environmental, policy, organizational, and systems theories.

Credit 3 units.

Typical periods offered: Spring

PHDC 8015 Systems Thinking in Health

The major challenges facing global and public health in the 21st century are truly daunting; they include global climate change, global pandemics along with the rise of vaccine denial, threats to food systems and physical activity, persistence of income disparities and health inequities; and healthcare systems that are fracturing as a result of multiple financial, legal, political, and governmental pressures. These 'wicked' problems resist easy solution, and they call for new ways of thinking, studying, evaluating, and implementing. Systems science is a relatively new interdisciplinary paradigm that suggests new ways of addressing these pressing public health challenges. The goal of the new Systems Thinking in Health class is to introduce systems thinking skills and knowledge to graduate students in public health and other closely related disciplinary programs. The course

will be conceptual and historical in nature, showing how systems concepts can be an alternative (and sometimes more effective) approach for understanding public health, compared to more usual research, evaluation, and intervention traditions. The course weaves together three broad types of activities: 1) exploration of core systems science concepts such as complexity, holism, dynamics, feedback, nonlinearity, and heterogeneity; 2) understanding how various public health challenges can be viewed through a systems lens such as global pandemics, nutrition and obesity, violence, global warming and environmental change, and health equity; and 3) introducing based systems science research and evaluation methods, including systems mapping, system dynamics modeling, network analysis, and agent-based modeling. At the end of the class, students will be able to: Articulate how major public health problems are embedded in complex systems, in and of themselves Understand the basic concepts and principles of systems science Understand how systems concepts and methods have been historically used to address critical health problems (e.g., modeling for pandemic preparedness) Reframe a specific public health problem in systems terms to support subsequent research, evaluation, or program implementation

Credit 3 units.

Typical periods offered: Fall, Spring

PHDC 8800 Professional Development Seminar I

Public Health doctoral students only

Credit 1 unit.

Typical periods offered: Fall

PHDC 8801 Professional Development Seminar II

Public Health doctoral students only

Credit 1 unit.

Typical periods offered: Spring

PHDC 8803 Professional Development Seminar IV

This course, Professional Development IV, would be part of our expansion of professional development for PhD students from two 1-credit courses taken in the first two semesters to a total of four 1-credit courses. Students will continue to learn about the research and resources WashU has to offer while adding additional skills like grant writing, presentation skills, how to write a proposal for a conference presentation, and other "soft skills" that are part of a career in public health.

Credit 1 unit.

Typical periods offered: Spring

PHDC 9000 Practicum in Research I

This is the first of three required courses for the research practicum sequence. Two options exist for students to meet practicum requirements: a) working on a faculty research project, or b) conducting an independent research project, under the guidance of a faculty advisor serving as the practicum instructor. The most important consideration during the student's research practicum should be developing the capacity for doing independent research. Students should have the opportunity to delineate and focus on a specific aspect of a larger project which may become their major responsibility. Credit 2 units.

Typical periods offered: Fall, Spring, Summer

PHDC 9001 Practicum in Research II

This is the second of three required courses for the research practicum sequence. Two options exist for students to meet practicum requirements: a) working on a faculty research project, or b) conducting an independent research project, under the guidance of a faculty advisor serving as the practicum instructor. The most important

consideration during the student's research practicum should be developing the capacity for doing independent research. Students should have the opportunity to delineate and focus on a specific aspect of a larger project which may become their major responsibility. Credit 2 units.

Typical periods offered: Fall, Spring, Summer

PHDC 9002 Practicum in Research III

This is the third of three required courses for the research practicum sequence. Two options exist for students to meet practicum requirements: a) working on a faculty research project, or b) conducting an independent research project, under the guidance of a faculty advisor serving as the practicum instructor. The most important consideration during the student's research practicum should be developing the capacity for doing independent research. Students should have the opportunity to delineate and focus on a specific aspect of a larger project which may become their major responsibility. Credit 2 units.

Typical periods offered: Fall, Spring, Summer

PHDC 9003 Practicum in Teaching I

This is the first of three courses in which students complete three required teaching practicums under the guidance of an experienced faculty member. Adequate knowledge of the subject matter is a prerequisite for a TP experience to earn practicum credit. This requirement can be met by the student having completed the course they wish to choose, or by the faculty supervisor for the teaching practicum certifying that the student has adequate knowledge of the subject matter.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHDC 9004 Practicum in Teaching II

This is the second of three courses in which students complete three required teaching practicums under the guidance of an experienced faculty member. Adequate knowledge of the subject matter is a prerequisite for a TP experience to earn practicum credit. This requirement can be met by the student having completed the course they wish to choose, or by the faculty supervisor for the teaching practicum certifying that the student has adequate knowledge of the subject matter.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHDC 9005 Practicum in Teaching III

This is the third of three courses in which students complete three required teaching practicums under the guidance of an experienced faculty member. Adequate knowledge of the subject matter is a prerequisite for a TP experience to earn practicum credit. This requirement can be met by the student having completed the course they wish to choose, or by the faculty supervisor for the teaching practicum certifying that the student has adequate knowledge of the subject matter.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHDC 9500 Mentored Assistant Teaching Experience

After completing the required practicum in teaching sequence, students may seek additional experience assisting in the teaching of core courses. This is an unpaid, non-credit course that exists to meet school needs, as well as the learning needs of the doctoral students. Credit 0 units.

Typical periods offered: Fall, Spring

PHDC 9501 Mentored Independent Teaching Experience

After completing the required teaching practicum sequence, eligible doctoral students may enroll in Mentored Independent Teaching Experience (MITE) with approval. The unpaid, non-credit MITE allows full-time students to teach their own masters-level course under the guidance of an experienced faculty member. The student leads all aspects of the course development and implementation, including developing and finalizing the syllabus, preparing all lectures and class activities, planning and conducting student assessments, and effectively managing student communications. Note: students beyond year 2 who enroll in a MITE must also enroll in Doctoral Research to maintain full-time student status.

Credit 0 units.

Typical periods offered: Fall, Spring

PHDC 9502 Area Statement & Qualifying Exam

Second-year doctoral students enroll in this course and successfully pass the area statement and qualifying exams before August 1 of their fourth year.

Credit 3 units.

Typical periods offered: Fall, Spring

PHDC 9900 Doctoral Research

This course allows students to continue research with advisors or engage in new research with other faculty mentors to build skills and working relationships. Students are expected to engage in mentored research experience with faculty through the entirety of their doctoral studies.

Credit 0 units.

Typical periods offered: Fall, Spring, Summer

Public Health Electives

PHEL 6001 Mental & Behavioral Health Epidemiology

This course covers the public health burden and potential causes of common mental and behavioral health problems, such as depression, anxiety disorders, and addictions. The course will be divided into three sections: (1) defining and measuring mental and behavioral health problems; (2) risk and causal factors for mental and behavioral health problems -- from cells to society; and (3) the use of epidemiologic findings to inform mental/behavioral health policy and prevention.

Credit 3 units.

Typical periods offered: Spring

PHEL 6002 Social Epidemiology

The goal of this course is to introduce students to the discipline of social epidemiology; and its role in understanding the social determinants of health and health inequities. Given the breadth of the developing field of social epidemiology, this course will provide a systematic and selective overview of literature in the field covering the history and development of the field of social epidemiology, theoretical perspectives, major substantive areas, conceptual approaches, and current controversies related to theory, research methods, and research findings. The approach taken includes consideration of fundamental causes of health as well as upstream and downstream factors. Substantive areas covered include but are not limited to race/ethnicity, socioeconomic position, social capital, gender, life course approaches and area effects, placing emphasis on methods and issues of measurement.

Credit 3 units.

Typical periods offered: Spring

PHEL 6003 Translating Epidemiology Into Policy

Policy has a well-documented, powerful and sustained effect on public health indicators. This course covers the epidemiologic basis for health policy, types of policy evidence, policy theories, study designs for understanding the effects of policy, methods of policy communication, and current controversies. Course content will be covered through readings, individual and group exercises, case studies, lectures, and discussions.

Credit 3 units.

Typical periods offered: Fall

PHEL 6004 The Role of Insurance in Public Health

The Public Health System focuses on the access and delivery for all Americans, with a special focus on the uninsured, those living in poverty and located in rural areas. Managed Care is playing an ever-increasing role in government sponsored healthcare including Medicaid, Medicare and Exchanges. Because populations historically taken care of by the public health system have a disproportionate burden of chronic disease and costly health conditions, managed care companies have taken innovative steps to control costs. Not only is it important for students to understand the basics of health insurance, but also the tools that payers use to manage and control costs including case management, utilization review, and formulary structure. Additionally understanding technology infrastructure, coordinated primary care delivery models and value-based contracting is essential to any leader in the public health space. Communicating these concepts to community partners, patients and the media is also a critical skill set.

Credit 3 units.

Typical periods offered: Spring

PHEL 6005 Applied Machine Learning Using Health Data

This course teaches popular machine learning (ML) models using Python and their applications on health data. The topics include (1) Python programming basics (e.g., coding with Python, Python modules such as NumPy, Pandas, Matplotlib, and Scikit-learn); (2) Classification ML models; (3) Regression ML models; (4) ML model training and validation; (5) Support vector machines and decision trees; (6) Ensemble methods; (7) Dimensionality reduction; and (8) Unsupervised learning techniques. Students who complete this course will: (1) Understand the algorithms for ML models widely adopted in health sciences; (2) Proficiently apply ML models to analyze health data; and (3) Appraise the relative strengths and weaknesses of alternative ML models in the contexts of real-world problem-solving. Weekly assignment helps students deepen their understanding of critical concepts and sharpen their model building and problem-solving skills using health datasets. Students who complete this course will have a solid foundation to pursue more advanced artificial intelligence (AI) topics, including deep learning. A prerequisite for this course is an introductory course on statistics or biostatistics. No prior exposure to Python programming is needed.

Credit 3 units.

Typical periods offered: Spring

PHEL 6006 Qualitative Research Methods

Examination of essential elements of qualitative designs, including identification of researchable questions, subject protection, interviewing, transcribing and analysis of data. Emphasis will be placed on qualitative data collection techniques and qualitative analysis of data. Students will learn about participant and non-participant observation, focus groups, and ethnography.

Credit 3 units.

Typical periods offered: Fall, Spring, Summer

PHEL 6007 Using Administrative Data for Health Services Research

The objective of this advanced graduate course is to prepare students to understand and use large administrative healthcare databases to perform epidemiologic / health services research. Lectures will cover the translation of clinical care into healthcare utilization data, review various types of national and state administrative databases, describe methods for administrative database research, and emphasize key issues related to data security and confidentiality. We will consider the strengths and limitations of observational studies using large databases to augment evidence from randomized clinical trials. Students will get hands-on experience with administrative data via programming with R statistical software. Students will develop and present to the class a research proposal in their own area of interest using administrative data. Students will further gain experience with healthcare database research by reviewing journal articles weekly.

Credit 3 units.

PHEL 6008 Systematic Review & Meta-Analysis

A systematic review attempts to identify, appraise and synthesize all of the empirical evidence that meets prespecified eligibility criteria to answer a given research question. A meta-analysis refers to the statistical methods used for contrasting and combining results from different studies in the hope of identifying patterns, sources of disagreement, and/or other interesting relationships that may come to light in the context of multiple studies. There are three learning objectives for this course: (1) to deepen the student's understanding of the key concepts and essential methods of a systematic review and meta-analysis through lectures and reading assignments; (2) to help students master the basic skills needed to conduct a systematic review and meta-analysis through hands-on exercises and projects; and (3) to help students complete a publication-quality systematic review or meta-analysis of their own choice as the final project of this course. Prerequisite for MPH students: S55-5240; permission from instructor for PhD students.

Credit 3 units.

Typical periods offered: Spring

PHEL 6009 Applied Deep Learning Using Health Data

Data are now available to social scientists in a way and quantity that has never existed before, presenting unprecedented opportunities for advancing social research and practices through state-of-the-art data analytics. On the other hand, dealing with extensive, complex, unconventional big data (e.g., free text, image, video/audio recording) requires revolutionary analytic tools only made available during the past decade. Artificial intelligence (AI), characterized by machine and deep learning, has become increasingly recognized as an indispensable tool in modern social and behavioral sciences. For example, AI methodologies have been applied to enhance the effectiveness of diagnosis and prediction of disease conditions, advance understanding of human development and functioning, and improve the effectiveness of data management in various social and human services. As a subdomain of AI, deep learning is based on artificial neural networks in which multiple (deep) layers of processing are used to extract higher-level features progressively from data. This layered representation enables modeling more complex, dynamic patterns than the traditional machine learning (which sometimes are called shallow learning as in contrast to deep learning), which finds its utility in analyzing the big data—data massive in scale and messy to work with (e.g., unstructured texts, images, audios, and videos). This course contributes to the overarching goal of training next-generation researchers in modern data analytics. It aims to equip students with the core knowledge and essential skills to apply deep learning models to address real-world problems. Through the course, students will familiarize themselves with computer programming in data science, learn state-of-the-art deep learning models, and apply them to social

and behavioral questions. In addition, one essential field of deep learning applications is assisting decision-making through identifying patterns and trends, improving prediction precision, and automating evidence collection, synthetization, and dissemination. Students who master deep learning tools will be at the frontier to leverage the power of AI in analytics and practices.

Credit 3 units.

Typical periods offered: Fall

PHEL 6010 Systems Thinking in Health

The major challenges facing global and public health in the 21st century are truly daunting; they include global climate change, global pandemics along with the rise of vaccine denial, threats to food systems and physical activity, persistence of income disparities and health inequities; and healthcare systems that are fracturing as a result of multiple financial, legal, political, and governmental pressures. These 'wicked' problems resist easy solution, and they call for new ways of thinking, studying, evaluating, and implementing. Systems science is a relatively new interdisciplinary paradigm that suggests new ways of addressing these pressing public health challenges. The goal of the new Systems Thinking in Health class is to introduce systems thinking skills and knowledge to graduate students in public health and other closely related disciplinary programs. The course will be conceptual and historical in nature, showing how systems concepts can be an alternative (and sometimes more effective) approach for understanding public health, compared to more usual research, evaluation, and intervention traditions. The course weaves together three broad types of activities: 1) exploration of core systems science concepts such as complexity, holism, dynamics, feedback, nonlinearity, and heterogeneity; 2) understanding how various public health challenges can be viewed through a systems lens such as global pandemics, nutrition and obesity, violence, global warming and environmental change, and health equity; and 3) introducing based systems science research and evaluation methods, including systems mapping, system dynamics modeling, network analysis, and agent-based modeling. At the end of the class, students will be able to: Articulate how major public health problems are embedded in complex systems, in and of themselves Understand the basic concepts and principles of systems science Understand how systems concepts and methods have been historically used to address critical health problems (e.g., modeling for pandemic preparedness) Reframe a specific public health problem in systems terms to support subsequent research, evaluation, or program implementation

Credit 3 units.

Typical periods offered: Spring

PHEL 6011 Independent Study

Credit 0 units.

Typical periods offered: Fall, Spring, Summer

PHEL 6012 Building Applications With Generative Artificial Intelligence

Build Applications with Generative AI is a dynamic, hands-on course designed for those eager to harness the power of generative artificial intelligence (Gen AI) to create innovative applications. Over 15 weeks, students will immerse themselves in the practical aspects of using Python, the leading programming language in AI development, to craft and deploy a variety of applications. From constructing intuitive data dashboards that visualize model findings to developing sophisticated chatbots and autonomous AI agents, this course covers the spectrum of Gen AI capabilities. Students will delve into advanced techniques such as image segmentation, object detection, retrieval augmented generation (RAG), and the integration of vector databases for a deep analysis of both qualitative and quantitative data. Whether you're generating lifelike images, automating systematic reviews, or building AI tools to combat disinformation, this course offers the

skills and insights to bring your ideas to life. By focusing on real-world applications, including deploying these innovations for global use, learners will not only gain a thorough understanding of Gen AI technologies but also acquire the expertise to pioneer new solutions in various domains. Get ready to transform the digital landscape by developing applications that bridge the gap between theoretical AI and practical, impactful solutions. Prerequisites for this course include proficiency in Python programming. While an understanding of machine learning and deep learning is helpful, it is not required for enrollment.

Credit 3 units.

PHEL 6013 Building Applications with Generative Artificial Intelligence

Build Applications with Generative AI is a dynamic, hands-on course designed for those eager to harness the power of generative artificial intelligence (Gen AI) to create innovative applications. Over 15 weeks, students will immerse themselves in the practical aspects of using Python, the leading programming language in AI development, to craft and deploy a variety of applications. From constructing intuitive data dashboards that visualize model findings to developing sophisticated chatbots and autonomous AI agents, this course covers the spectrum of Gen AI capabilities. Students will delve into advanced techniques such as image segmentation, object detection, retrieval augmented generation (RAG), and the integration of vector databases for a deep analysis of both qualitative and quantitative data. Whether you're generating lifelike images, automating systematic reviews, or building AI tools to combat disinformation, this course offers the skills and insights to bring your ideas to life. By focusing on real-world applications, including deploying these innovations for global use, learners will not only gain a thorough understanding of Gen AI technologies but also acquire the expertise to pioneer new solutions in various domains. Get ready to transform the digital landscape by developing applications that bridge the gap between theoretical AI and practical, impactful solutions.

Credit 3 units.

Typical periods offered: Fall, Spring

PHEL 6014 Bullet Related Injury and Policy in St. Louis and the United States

The United States holds some of the least desirable superlatives of any nation on Earth when it comes to Bullet Related Injury (BRI), including having one of the highest rates of BRI deaths in the world.¹ Globally, the U.S. ranked 7th for rates of BRI homicides in 2021, and among high-income countries with populations of at least 10 million, it ranked first.² In 2022, nearly 50,000 Americans died from BRI, and as of 2020, BRI was the leading cause of death for American children and adolescents.^{3,4} BRI is also the leading cause of death among Black men from birth to middle-age.⁵ Locally, from 2017 to 2023, St. Louis had the highest rate of fatal BRI of any city in the United States,⁶ and in 2022, Missouri ranked 5th in the nation for its rate of fatal BRI, with nearly 1,500 deaths.⁷ This course, co-taught by Dr. LJ Punch, a St. Louis trauma surgeon and advocate, and Dr. Caitlin McMurtry, a Brown School assistant professor, asks students to reconsider everything they know about "gun violence." It upends the way we think about firearms, trauma, and violence in our communities by using Bullet Related Injury as a framework to consider the wounds that bullets create – "the physical, emotional, social, and spiritual impact a bullet has;"⁸ the injuries seen and unseen, in individuals, families, communities, and our society. In addition to learning about the history and politics of BRI and modes of BRI transmission (including intentional and unintentional injuries and those inflicted by oneself and by others), we will center the experiences of those most affected by BRI, hearing from patients and their loved ones. We will consider gun positive and gun negative attitudes in Black Americans and how those perspectives impact perceived risk of BRI and attitudes toward firearm ownership. We will explore how BRI in one person can create

a self-perpetuating cycle of injury and what it means to treat BRI at every level – how we practice medicine, how we care for the whole person, how we change the social determinants of BRI, and how we un-break broken trust in our communities.

Credit 3 units.

Typical periods offered: Fall, Spring

Public Health Foundation

PHFN 5000 Epidemiology

The purpose of this course is to present fundamentals of Epidemiology as a framework for using evidence-based approaches in addressing population health issues. Students will learn the role of epidemiological approaches for describing and quantifying health problems, and methodological approaches for assessing risk factors and disease etiology.

Credit 3 units.

Typical periods offered: Fall

PHFN 5001 Biostatistics

This course provides an introduction to quantitative data analysis as it is applied in public health. Biostatistics is one of the core disciplines of public health; but it also provides a set of analytic tools which are used across all the other core and associated public health disciplines. This course will teach students how to think about data clearly; how to describe important characteristics of public health data; how to design, implement, and interpret basic statistical analyses which are appropriate for the research question and the characteristics of the data; and how to communicate analysis results effectively.

Credit 3 units.

Typical periods offered: Fall

PHFN 5002 Environmental Health

This course presents a broad survey of the major environmental health issues facing contemporary society in first and third world countries. The course provides an overview of the interaction of the physical, psychological, and social environments of individuals in which they work and live. The course presents ecological concerns along with factors related to personal and community health.

Credit 3 units.

Typical periods offered: Fall, Spring

PHFN 5003 Cross-Cutting Themes in Public Health

The purpose of this course is to introduce public health students to the crucial and timely cross-cutting themes in public health. The course will cover a range of topics, including: the role of transdisciplinary science and collaboration in the development, implementation and translation of science to the population at large; evidence-based approaches to decision making in contemporary public health practice; methods for dissemination and implementation of public health to policy and practice; the importance of health disparities to the study of public health, and the role of ethics in the profession of public health.

Credit 1 unit.

Typical periods offered: Fall

PHFN 5004 Public Health Seminar I

In this seminar, students will work closely with faculty members in small groups to process, systematically analyze and discuss timely, real world public health challenges and solutions.

Credit 1 unit.

Typical periods offered: Fall

PHFN 5005 Public Health Seminar II

In this seminar, students will work closely with faculty members and peers to systematically analyze and discuss timely, real world public health challenges and solutions. Students enrolled in PHS II are required to attend the monthly Public Health Speaker Series lectures that will take place once in February, March and April from 12pm-1pm. The lectures will cover content that will inform class discussion and participation in the class session. Public Health Speaker Series dates will be published closer to the start of the semester.

Credit 1 unit.

Typical periods offered: Spring

PHFN 5010 Foundations of Applied Practice

This workshop is designed to provide students with the information needed for the practicum/internship search, interview, and selection process. Students will learn the steps for securing a practicum/internship. In addition, they will create a personal rubric for choosing a practicum site. Students will also have the opportunity to ask questions of members of the field education team. After the workshop, students will be required to follow up with a field advising appointment to discuss their practicum/internship search process. This is a required course for all students prior to entering practicum.

Credit 0 units.

Typical periods offered: Fall, Spring

Public Health Practicum

PHPC 6001 Practicum I - MPH Program

This course provides supervised experience in application of public health techniques through work in a public health agency or other health care organization.

Credit 1-3 units.

Typical periods offered: Fall, Spring, Summer

PHPC 6002 Practicum II - MPH Program

This course provides supervised experience in application of public health techniques through work in a public health agency or other health care organization.

Credit 1-3 units.

Typical periods offered: Fall, Spring, Summer

PHPC 6003 Practicum III - MPH Program

This course provides supervised experience in application of public health techniques through work in a public health agency or other health care organization.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHPC 6004 Elective Practicum I - MPH Program

This course provides supervised experience in application of public health techniques through work in a public health agency or other health care organization.

Credit 1-3 units.

Typical periods offered: Fall, Spring, Summer

PHPC 6005 Elective Practicum II - MPH Program

This course provides supervised experience in application of public health techniques through work in a public health agency or other health care organization.

Credit 1-2 units.

Typical periods offered: Fall, Spring, Summer

PHPC 6006 Elective Practicum III - MPH Program

Students must consult with their Office of Field Education adviser prior to registering for this course.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHPC 6007 MSW/MPH Dual-Concentration Practicum I

The MSW/MPH Dual-Concentration Practicum provides learning activities that meet the accreditation requirements of both MSW and MPH accrediting bodies. Students must select a practicum site that is affiliated for both programs. Students will complete a dual ELA to identify learning activities. A site visit and final evaluations will be used to assess student learning and provide a final grade.

Credit 1-3 units.

Typical periods offered: Fall, Spring, Summer

PHPC 6008 MSW/MPH Dual Concentration Practicum II

This course provides supervised experience in application of public health techniques through work in a public health agency or other health care organization.

Credit 1-2 units.

Typical periods offered: Fall, Spring, Summer

PHPC 6009 MSW/MPH Dual Concentration Practicum III

This course provides supervised experience in application of public health techniques through work in a public health agency or other health care organization.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

Public Health Research

PHRS 6000 Research Methods

Focuses on evaluation at a variety of levels (individual, group, organization, community). Includes problem assessment, specification and monitoring of interventions, validation of measurement methods, and analysis and presentation of data.

Credit 3 units.

Typical periods offered: Fall

PHRS 6001 Applied Linear Modeling (ALM)

This course focuses on statistical modeling and analysis methods relevant to epidemiological and clinical research, as well as applied research in behavioral, social, and health sciences. A general linear models approach is taken to data analysis strategies using linear, logistic, and poisson regression, as well as ANOVA methods for repeated measures.

Credit 3 units.

Typical periods offered: Fall, Spring

PHRS 6002 Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)

This course focuses on program evaluation, outcomes research, cost effectiveness research, methods for executing and evaluating health education intervention plans, quantitative and qualitative methods and their application to public health practice.

Credit 3 units.

Typical periods offered: Fall, Spring

PHRS 6003 Advanced Applied Linear Modeling

In this course, we will learn to apply Advanced Statistical Modeling techniques including Multiple and Logistic Regression, Generalized Linear Models (GLM), multivariate analysis of variance (MANOVA), analysis of covariance (ANCOVA) and other techniques to the field of Public Health broadly defined. Through readings, lectures, discussions, and hands on work, we will learn to use and critically think about techniques as well as be aware of limitations when dealing with real world problems. This class is directed towards epidemiology and biostatistics students in the MPH program who need to use statistical methods to answer substantive questions of interest. The course will focus on problem solving and decision-making skills to choose a statistical approach appropriate to the research question, understand the limitations of that approach given your data, interpreting your results correctly, and reaching sound conclusions about the substantive question at hand.

Credit 3 units.

Typical periods offered: Spring

Population Health Sciences

PHS 5100 Development, Validation and Application of Risk Prediction Models

This course will provide the knowledge and principles of predictive modeling, with applications to clinical and population health settings. Topics covered will include design, conduct, and application of risk predictions; statistical methods and analysis for model development and validation; evaluation of prediction models; emerging new methods; and risk stratification to identify a risk group, to assess eligibility to clinical trials and interventions, and to guide prevention priorities. The student will learn these topics through lecture, class discussions, practice lab, and homework.

Credit 3 units.

Typical periods offered: Spring

PHS 5140 Randomized Controlled Trials

This course provides a comprehensive introduction to randomized controlled clinical trials. Topics include types of clinical trials research (efficacy and effectiveness trials), study design, treatment allocation, randomization and stratification, quality control, analysis, sample size requirements, patient consent, data safety and monitoring plans, reporting standards, and interpretation of results. The role of randomized trials in comparative effectiveness research and the evaluation of prevention strategies is also addressed. Application of results of trials to inform practice is emphasized throughout. Evaluation: Students design a randomized controlled trial in their own field of interest, write a protocol for it, and critique recently published medical literature.

Credit 3 units.

Typical periods offered: Fall

PHS 5160 Dissemination and Implementation Science

This course provides an overview of dissemination and implementation (D&I) science (i.e., translational research in health). Topics include the importance and language of D&I science; designs, methods, and measures; differences and similarities across clinical, public health, and policy settings; selected tools for D&I research and practice; and future issues.

Credit 3 units.

Typical periods offered: Spring

PHS 5230 Multilevel and Longitudinal Data Analyses for Clinical Research

The course covers basic statistical concepts and methods for continuous, categorical, count, and time-to-event outcome data in multilevel and longitudinal settings. The course focuses on the application of these methods in clinical and public health research, on the explanation of model specification, and on the interpretation of model results. The statistical methods are implemented using R packages. Prerequisite: Knowledge of generalized linear model and use of R.

Credit 3 units.

Typical periods offered: Spring

Public Health Skill Lab

PHSL 6000 Skill Lab: Statistical Analysis: SAS

This course will provide an introduction to the SAS statistical package in a Windows environment. Students will learn the basics of data management and manipulation through hands-on tutorials. Topic will include importing/exporting data, merging datasets, recoding variables, simple statistical analyses and troubleshooting. At the end of the course, students will have the skills necessary to use SAS for advanced biostatistics and epidemiology courses.

Credit 1 unit.

Typical periods offered: Fall, Spring

PHSL 6001 Skill Lab: Statistical Analysis Using STATA

This skill lab will introduce students to the STATA statistical software package. Students will learn data concepts such as opening/importing/exporting data, applying formats, using syntax, creating variables, graphs and more. Statistical analysis techniques will be covered for both continuous and categorical outcome variables, including chi-square, t-tests, regression and survey weights. Students will demonstrate acquired skills during a final project working with data and running a statistical analysis and interpretation.

Credit 1 unit.

Typical periods offered: Fall, Spring

PHSL 6002 Skill Lab: Introduction to the R Statistical Programming Language & Environment

This course will introduce students the fundamentals of the R language and RStudio environment. The first session will cover how to obtain and install R and RStudio, import data, create descriptive statistics, and plot simple graphics. The second session will delve into data structures and classes, data manipulation and management, and common data analyses (t-tests, ANOVAs, correlations, regressions, etc.). Students will explore R's graphics capabilities and some of the publishing tools built into RStudio during the third session. Students are expected to have taken at least one introductory statistics course, but need no prior computer programming experience.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHSL 6003 Skill Lab: Data Management

This skill lab will introduce students to the basic aspects of data management, starting with planning your database, moving to collecting, entering and cleaning data. Other topics will include data types, creating and recoding variables, formats and value labels, data dictionaries, missing data, and merging data. Students will learn to use descriptive statistics to quickly assess data integrity. Course will be hands on, primarily using Stata with other software where relevant. A majority of time spent working with data involves cleaning, manipulating, and preparing for analysis. This workshop will focus on these skills.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHSL 6004 Skill Lab: Manuscript Development

This course will help students learn to write scholarly manuscripts for publication in peer-reviewed scientific journals. Students will learn and apply a prescriptive formula for writing each section of a manuscript and responding to reviewer critiques. The course is designed for those who are new to writing for publication as a lead author, and it emphasizes reporting findings from empirical studies. Students must enter the course with a manuscript project to work on. They will develop the manuscript through the course and submit it for peer review as the final course requirement.

Credit 1 unit.

Typical periods offered: Summer

PHSL 6005 Skill Lab: Qualitative Data Analysis

This weekend-intensive course focuses on analysis of qualitative data (e.g., interview transcripts) in public health and social work research. It will introduce the theory and methods of qualitative inquiry, highlighting the iterative nature of data analysis, coding, and writing. Students will learn the basics of NVivo using sample data for exercises and assignments and will leave prepared to analyze their own data.

Credit 1 unit.

Typical periods offered: Fall, Spring

PHSL 6006 Skill Lab: Introduction to GIS & Spatial Mapping

Geographic Information Systems (GIS) is a system for collecting, storing, displaying, and analyzing geographic information. This 1-credit course will serve as an introduction to applications of GIS and spatial mapping for social work and public health topics. Students will be introduced to the visual storytelling and data analysis power of creating maps. This course is intended to be a fundamental lab that provides hands-on experience in basic GIS skills. Methods for applying GIS techniques and other spatial mapping tools for data visualization will be introduced, and several examples of GIS in environmental and social domains will be analyzed. Students will learn about mapping terminology and skills to produce and analyze digital data maps. Students are not permitted to take concurrently with PHCC 6001 - Foundations of Geographic Information Systems (GIS) for the Applied Social Sciences.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHSL 6007 Skill Lab: Practical Consideration in Developing Health Policy

This course will look at real world applications of public health principles as they apply to developing and proposing new health policy. The course will review basic public health principles as they apply to policy development and will provide students with an opportunity to work through the health policy development and proposal process.

Credit 1 unit.

Typical periods offered: Spring

PHSL 6008 Skill Lab: Effective Teams

Effective Teams will help students understand the key attributes and behaviors needed for successful team collaboration when partnered with diverse styles and personalities. Who leads and how is power balanced? How can team members have equal responsibility when skill sets vary? How can communication gaps be closed? How can less engaged team members be motivated?

Credit 1 unit.

Typical periods offered: Fall

PHSL 6009 Skill Lab: Data Visualization

Students from public health, computer science and design will form interdisciplinary teams to learn how health data can be analyzed and used to build prototypes, embedding visualizations to display data in clear, compelling, and engaging ways. Students will develop and apply skills and learn and use software for data management and analysis as well as information design. They will learn to work in interdisciplinary teams and learn from instructors across disciplines. Students will also gain skills in presenting and critiquing designs.

Credit 1 unit.

Typical periods offered: Fall, Spring, Summer

PHSL 6010 Skill Lab: Advanced Data Management

This skill lab will cover intermediate and advanced aspects of data management using STATA, however all concepts covered are transferable to similar software packages. Topics will include missing data, finding duplicate observations, repeated measures data, programming loops and data transformations such as merge, append, collapse, conversion from long to wide, etc.

Credit 1 unit.

Typical periods offered: Fall

PHSL 6011 Skill Lab: Introduction to Cost Effectiveness Analysis for Evaluating Policies & Programs

The objective of this course is to prepare students to design, interpret, and conduct a fundamental type of economic evaluation for a variety of policy settings. Cost-effectiveness analysis (CEA) is a common research and decision-making tool in public health and medicine, but the basic concepts are also applicable to social work and public policy. Under certain conditions, CEA can help analysts add structured, transparent, and scientific information to policy evaluation and resource allocation discussions. The course will meet in 5 sessions. Each day will begin with a core lecture to introduce new concepts and techniques. Small group activities and hands-on exercises will then be used to apply concepts and reinforce content. A variety of examples, including those which students may bring from outside experience or employment, will be reviewed and discussed to illustrate the range of ways in CEA can be applied. After establishing fundamental concepts and basic methods in CEA, the course will include how to interpret and communicate results, discussion of proper use and misuse of

CEA, alternative methods, limitations, and advanced topics for further study. No specialized software is required. Students are encouraged to bring laptops and questions, topics, data, or applications from outside settings.

Credit 1 unit.

Typical periods offered: Summer

PHSL 6012 Skill Lab: Introduction to Python for Public Health Data Analysis

This course will introduce students to the fundamentals of the Python language, common Python modules for data manipulation and analysis, and Jupyter notebook environment. The course will begin with how to acquire data from publicly available sources and databases, cleansing and transformation of data, creation of descriptive statistics and graphics. The course will also introduce Python's natural language processing and machine learning modules for basic data classification and predictive modeling applications. Throughout the course, instruction and assignments will promote best practices for creating programs that can be shared and used for reproducible research.

Credit 1 unit.

Typical periods offered: Fall, Summer

PHSL 6013 Skill Lab: Program Sustainability: Assessment Tools & Planning Strategies

The term sustainability - and the importance of sustainability - is often referenced regarding human services work. But it's often not clear what kind of sustainability is meant and what program leaders can do to improve the sustainability of the vital services they provide. This course introduces participants to a holistic Program Sustainability framework with eight domains: (1) Environmental Support, (2) Funding Stability, (3) Partnerships, (4) Organizational Capacity, (5) Evaluation, (6) Program Adaptation, (7) Communications, (8) Strategic Planning. Evidence shows that each of these dimensions is critical to public health and social service programs' long term capacity to operate and deliver on their missions. Participants will build their understanding of the framework, use the Program Sustainability Assessment Tool to assess a program of interest, and learn strategies for using the tool in group/organizational settings. Assessment results will be used to identify program strengths and determine key strategic areas for action. Participants will leverage this information to build a program sustainability action plan.

Credit 1 unit.

Typical periods offered: Summer

PHSL 6014 Skill Lab: Advanced Data Management & Statistical Analysis in SAS

This course will build upon the material covered in S55-5960 (DATA ANALYSIS: SAS) to provide students with the skills to tackle more complex data management and analysis tasks using the SAS statistical package in a Windows environment. Students will learn through hands-on tutorials and assignments. Topics will include arrays, exporting data, complex merging of datasets (e.g., merge-matching), developing algorithms, testing the assumptions of common statistical tests, and troubleshooting. Prerequisite: S55-5003, S55-5000, and S55-5960.

Credit 1 unit.

Typical periods offered: Fall

PHSL 6015 Skill Lab: SQL - Intro to Using Relational Databases to Analyze Publicly Available Data

This course will introduce students to the database language SQL using the open-source relational database management system MySQL. The course will begin with an introduction to databases and then cover the major features of a database. Students will learn to create tables and fields, define relationship between tables, and manipulate numbers, strings, and dates. Students will obtain solid knowledge of the language, how to retrieve and manage data efficiently. By the end of the class, students will be able to download a publicly available dataset, import it into MySQL, and query to filter/extract subsets of data.

Credit 1 unit.

Typical periods offered: Spring, Summer

PHSL 6016 Skill Lab: Systematic Reviews

A systematic review is a standardized framework used to synthesize and assess the quality of the literature on a specific research topic. For both social workers and public health professionals, systematic reviews can provide insight into which interventions, programs, and policies are the most effective for addressing diverse social welfare and health problems among our clients and the public. Systematic reviews also enable us to learn about gaps in knowledge and limitations in existing literature to guide future social work and public health practice, research, and policy. This course covers the entire range of conducting a systematic review, including framing a review question, implementing a search strategy, and synthesizing data extracted from eligible studies.

Credit 1 unit.

Typical periods offered: Spring

PHSL 6017 Skill Lab: Applied Qualitative Data Analysis

This course allows students to continue to develop the qualitative data analysis skills introduced in Part 1 of this skill lab series. Students will bring their own qualitative data (e.g., interview transcripts) to analyze using NVivo. During class, the instructor will review all steps of the analysis process (e.g., codebook development, first-round coding, second-round coding, matrix analyses) and then work with students individually to create analysis plans and agree upon final assignment formats. Students will collaborate with one another to act as independent auditors of each other's analysis to gain feedback on their coding from peers. Students will leave having advanced the analysis of their data with a detailed plan for continued analysis. The instructor will be available after the completion of the class to support students' publication efforts

Credit 1 unit.

Typical periods offered: Spring

PHSL 6018 Skill Lab: Data & Algorithmic Bias

In public health and other social sciences, research is conducted by scientists working in a biased system using data from human beings living in a biased society. As a result, how we measure, collect, manage, analyze, report, disseminate, and implement science all have the potential to reinforce or widen existing biases. This potential to worsen existing biases goes against the goals and aspirations of most social scientists who are often working to protect and improve lives. In this skill lab, students will be introduced to potential sources of data and algorithmic bias and some strategies for identifying, understanding, and avoiding data bias.

Credit 1 unit.

Typical periods offered: Spring, Summer

PHSL 6019 Skill Lab: Strategic Healthcare Leadership

The goal of this course is to explore the applications of key strategic leadership principles to healthcare organizations. The Strategic Healthcare Leadership course is designed for students who aspire to leadership roles in healthcare sector organizations. Throughout the course, students will increase both their strategic thinking and leadership capacities with readings, role plays, experiential exercises, as well as self-reflection to sharpen an understanding of the complexity of the healthcare industry and how that complexity impacts effective decision making. The readings are books, case studies, and articles from the general leadership literature, and from the organizational change management literature. The course will be enriched by guest executives who join the discussion and invite you into their world. In their words and from their perspectives, you will experience what it takes to define an organization's strategy from current and former healthcare executives. Finally, the course will provide an opportunity to reflect upon and apply principles learned throughout the course with a small group final project/paper that analyzes what they have learned about strategic leadership in the course.

Credit 1 unit.

Typical periods offered: Fall

PHSL 6020 Skills Lab: Using Publicly Available Global Health Data in Epidemiology & Biostatistics

This skill lab will provide practical variable operationalization, preliminary descriptive analysis, and analysis protocol writing skills that are relevant for students who are: (1) completing independent research projects (i.e., MPH capstone, research practicum, etc.), (2) seeking a data-driven global health career using complex and nationally representative household surveys, and (3) developing the skills to analyze the major causes of morbidity and mortality in low and middle income countries. Students will learn how to access publicly available global health datasets (i.e., Demographic and Health Surveys) commonly used by data scientists and epidemiologists to inform the policies, programs, and services of national health ministries and international health organizations. Students will then gain mastery of statistical and methodological considerations for handling complex survey data by understanding the principles of multistage sampling and probability. Students will increase confidence in developing pragmatic research questions that can be addressed using publicly available global health datasets and exploring data and statistical issues that require reformulation of research questions: missingness, low cell sizes, skip logic patterns, non-response, etc. The course instructor will systematically guide students through important stages of research question formulation, data access, preliminary data analysis, and descriptive statistics. The final project will be a 5 - page, double spaced, APA-style research analysis protocol consisting of research question and rationale (1 page), dataset description (0.5 page), descriptive statistics table (1 page), feasibility of addressing the research question (0.5 page), variable operationalization (1 page), and analytical plan for further descriptive or inferential statistics (1 page, completing the full analysis is not required). Overall, this course will equip students in independently answering a variety of research questions using publicly available global health datasets.

Credit 1 unit.

Typical periods offered: Fall

PHSL 6021 Skill Lab: Political Strategy for Gun Policy in the United States

In this five-week skill lab, we will focus on political strategy as it relates to gun laws in the United States, paying special attention to state-level ballot initiatives. We will review the politics of guns in America, the importance of the Second Amendment and recent decisions by the U.S. Supreme Court, the influence of lobbying groups like the National Rifle Association, and political advocacy tactics at the state

level. We will also examine case studies to understand these ideas in practice, including Maine's unsuccessful attempt in 2016 to pass a ballot initiative aimed at expanding firearm background checks. The course will operate as an upper-level graduate seminar (i.e., it will be heavy on readings and required material) and class time will focus on discussion. Students will demonstrate their learning by collaboratively designing a ballot initiative campaign to expand or restrict firearm access in a state of their choosing. Prior enrollment in the skill lab, Gun Violence Epidemiology and Policy in the United States, is strongly encouraged, but not required. Familiarity with the basic structure and operation of American government is mandatory.

Credit 1 unit.

Typical periods offered: Fall

Public Health Transdisciplinary Problem Solving

PHTPS 6000 Public Health in St. Louis

This course provides critical knowledge and skills relevant to understanding the importance of context in public health practice. Seminal reports exhort the St. Louis community to consider the intersection of social, economic, and political structures and their impact on public health. Forward Through Ferguson: A Path Toward Racial Equity was written in response to the social and political unrest in the region after an unarmed black teenager was shot and killed, and it identifies the correlations between race and access to health and quality life. The For the Sake of All report outlines the connections between the social determinants of health and the unequal distribution of health in the St. Louis region. This course will use community-engaged teaching to explore these issues. Students will work alongside public health practitioners and community members to think together around strategies to move these recommendations forward.

Credit 3 units.

Typical periods offered: Spring

PHTPS 6001 Global Mental Health

This course aims to provide participants with an in-depth understanding of the current debates that are shaping Global Mental Health (GMH) in Low and Middle Income Countries (LMICs). It examines the history of GMH, its key principles, policies and practices alongside the challenges inherent to their implementation in some of the most challenging contexts. Using practical examples of GMH interventions in the area of stigma, depression, trauma and the mental health of marginalized populations, students will be encouraged to critically engage with concepts relevant to, social work, public health, sociology and anthropology so as to reflect on the design, applicability and relevance of such interventions. Furthermore, the course will examine several key issues inherent to the field, such as the cultural validity of modern psychiatric diagnosis, as well as its research methods and assessment techniques. Guest speakers will include individuals working on the forefront of GMH application. The course is designed to compel future social workers to think globally but act locally when debating and addressing mental health issues in an international context.

Credit 3 units.

Typical periods offered: Fall, Spring

PHTPS 6002 Protection of Women & Children in Humanitarian Response

It is currently estimated that one out of every 113 people is seeking asylum, internally displaced or a refugee; this is a level of global risk for which there is no known precedent. Conflict, climate change, drought and other natural disasters have resulted in the highest levels of displacement ever recorded, affecting more than 65.3 million people. Conflict and natural disasters destroy communities; wreak havoc on food, sanitation, security and supply chains; and propel survivors into fragile refugee camps and crowded urban areas. Increasingly, humanitarian responders are also asked to promote health systems development in fragile states and post-conflict scenarios. There is a critical need for technically competent public health professionals who understand the global dynamics of acute and complex emergencies, including the continuum from prevention and risk reduction to emergency response and the transition to development. This course explores operational ways of addressing protection concerns for women and children in natural disasters and war. It examines protection from both a reduction of physical risk and a promotion of developmental well-being perspectives. Students will develop a practical understanding of effective interventions for preventing and responding to specific protection concerns, including child-family separations; child recruitment and use as armed combatants; sexual violence and abuse; and psychosocial well-being. Students will explore systemic approaches to promoting a protective environment for women and children in emergencies and post-conflict/reintegration transitions. Students will review strategies for incorporating critical elements of protection into broader humanitarian response operations; coordination among humanitarian agencies; evidence-based programming; community participation; and advocacy and policy change.

Credit 3 units.

Typical periods offered: Fall, Spring

PHTPS 6003 Health & Place: Spatial Thinking & Applied Methods

Along with person and time, place is one of the three key characteristics via which public health researchers and practitioners describe health and disease patterns in populations. Health and social disparities can be the result of geographic location and/or of the social, cultural, economic, or political contexts of this location. In this course, students will learn to use and integrate spatial thinking as well as ecologic, quantitative, and social approaches to frame and tackle public health problems. Throughout the course, health geography and spatial epidemiology will be used as conceptual and methodologic frameworks for understanding health and place relations. In addition to covering the use of key spatial concepts, students will acquire basic hands-on experience with a range of applied analytic tools. Prior experience with Geographic Information Systems (GIS) preferred.

Credit 3 units.

Typical periods offered: Fall

PHTPS 6004 Chronic Disease: Obesity Prevention & Public Health Policy

Students will be exposed to a wide range of perspectives from diverse disciplines about the various causes and potential solutions to key public health issues in the United States. Students will work in groups to integrate these transdisciplinary perspectives into a richer understanding of public health problems and propose new solutions that draw upon the contributions of at least three different disciplines.

Credit 3 units.

Typical periods offered: Fall, Spring

PHTPS 6005 Eliminating Health Disparities

Individuals and families living in poverty are in frequent contact with organizations providing a range of social services. Their use of public health services is much less common, despite the fact that they have many unmet health needs. In this course, students will apply transdisciplinary problem solving skills to generate strategies for better integrating health and social services to help eliminate health disparities.

Credit 3 units.

Typical periods offered: Spring

PHTPS 6006 Global Nutrition and the Environment: Foods Systems in a Changing World

This transdisciplinary problem-solving course explores the complexity and reciprocity of human nutrition and a changing environment. Globally, food systems contribute over 30% of greenhouse gas emissions, 70% of freshwater retrievals, and 40% of land use, yet enormous inequities persist in terms of access to high quality foods, malnutrition prevalence, and the impacts of climate change on food security. This course provides foundational knowledge in public health nutrition from cells to society and the skills necessary to critically analyze sustainability issues related to food systems. We then cover novel as well as evidence-based solutions to achieving sustainable, healthy, and equitable food systems. Learning labs (dietary assessment, anthropometric measures, etc.), field trips (WashU edible plant tour, community gardens, etc.) and guest lectures from leaders in the field are integral to course learning.

Credit 3 units.

Typical periods offered: Fall

PHTPS 6007 Interrogating Health, Race & Inequalities

Interrogating Health, Race, and Inequalities is intended for graduate students in the School of Social Work and in Arts & Sciences as well as advanced undergraduates in Arts & Sciences who have previous coursework in medical anthropology, public health, or urban policy. The fundamental goal of the course is to demonstrate that health is not merely a medical or biological phenomenon but more importantly the product of social, economic, political, and environmental factors. To meet this goal the course is designed to examine the intersection of race/ethnicity and health from multiple analytic approaches and methodologies. Course readings will draw from the fields of public health, anthropology, history, and policy analysis. Teaching activities include lectures, group projects and presentations, videos, and discussions led by the course instructors. These in-class activities will be supplemented with field trips and field-based projects. By the end of the course it is expected that students will have a strong understanding of race as a historically produced social construct as well as how race interacts with other axes of diversity and social determinants to produce particular health outcomes. Students will gain an understanding of the health disparity literature and a solid understanding of multiple and intersecting causes of these disparities.

Credit 3 units.

Typical periods offered: Fall

PHTPS 6008 Climate Change & Public Health

This course will explore the real and potential impacts a changing climate will have on public health. The course explores methods for understanding and studying these effects as well as the role of public health (as a discipline) in planning for and mitigating potential effects. Topics covered will include, but are not limited to: theoretical underpinnings of climate change, changing patterns in infectious disease and vectors, exposure to temperature extremes, emergency response (e.g. more extreme weather events), public policy, and more.

Credit 3 units.

Typical periods offered: Fall

PHTPS 6009 From the inside-Out: Public Health & The Built Environment

The built environment has contributed to and advanced public health and safety since the era of 2200 BCE when Hammurabi, the founder of the Babylonian Empire, proclaimed the 'Code of Hammurabi.' This code called for construction of 'firm houses' that would not collapse on their owners and for the imposition of severe penalties on constructors whose buildings collapsed. The same basis of care and prudent practice is in force today in building design, construction, environmental engineering, and community and urban design in order to protect public health and safety and the natural environment. This Transdisciplinary Problem Solving course will discuss issues in the US and within a global context of housing, healthy communities, sustainable design, environmental quality, and occupational health and safety. Students will prepare a health impact assessment (HIA) for a selected building or community development site.

Credit 3 units.

Typical periods offered: Spring

PHTPS 6010 Protection & Well-being of Displaced Children (Colombia)

Colombia's decades of conflict have led to one of the world's largest contexts of internal displacement in known history. United Nations High Commissioner for Refugees (2018) figures show that Colombia is currently home to 5,761,000 internally displaced persons (IDPs). The government and the Revolutionary Armed Forces of Colombia (FARC) signed a peace agreement in 2016; however, violence persists between remaining armed groups. Further, due to the humanitarian crisis in Venezuela, 1.2 million Venezuelan migrants and refugees have recently crossed the border into Colombia. Although the government of Colombia has extended extraordinary support to Venezuelans, conditions remain dire for many. This course is grounded in the Global Classroom concept of distributed learning that mobilizes the power of a diverse set of learners to collectively explore the multifaceted challenges associated with organized efforts to protect children and promote their well-being in humanitarian settings. It will emphasize global standards and best practices; the value of local, culturally grounded voices/experiences; collaborative workspaces and dialogues; and locally informed investigations and assignments. The course format will include classroom lectures, discussion seminars, site visits, and data collection in Colombia.

Credit 3 units.

Typical periods offered: Spring

PHTPS 6011 Gender, Poverty & Global Health

This course comes in the wake of the new sustainable development agenda to end poverty by 2030, which includes a stand-alone goal on gender equality and the empowerment of women and girls. It explores the interconnections between gender, health, and extreme poverty within low- and middle-income countries. Specifically, students will examine a broad range of data and programmatic evidence related to how gender norms and inequalities influence health and development outcomes in and across various global health sectors, including: maternal and child health; nutrition; family planning; water, sanitation and hygiene; and agriculture. Further, by reviewing government policies, donor mandates and gender-based interventions, students will learn how to identify and explain health-related gender gaps, as well as how to address gender norms and power relations in program/policy planning, implementation, and evaluation. At the end of the course, students will use in-depth case studies to propose programmatic and policy driven action to overcome current gender-related obstacles and advance global health and development.

Credit 3 units.

Typical periods offered: Spring

PHTPS 6012 Global Reproductive Health

This course will provide an overview of the critical issues in global reproductive health, covering basic reproductive biology and epidemiological trends related to contraceptive use, fertility, and adverse birth outcomes. Additionally, applying a solutions-based approach, we will use key theoretical frameworks and cases studies from the field to understand the influence of social, behavioral, and environmental factors on adverse reproductive health outcomes. Finally, students will be engaged in topics related to what the field has achieved thus far, including: changes in policies, laws, and development approaches; the use of new technologies; the promotion of constructive male engagement; and overall improvements in outcomes related to family planning, fertility, maternal health, violence, sexually transmitted infections, and HIV/AIDS. Obstacles to progress such as waning political commitment, trends in funding, weakened health systems, and cultural opposition, will also be discussed.

Credit 3 units.

Typical periods offered: Fall

PHTPS 6013 Sustainability, Development & Health: Costa Rica

Sustainability Studies is a transdisciplinary field that integrates the economic, social, environmental, and technological problems that humanity must solve if our species is to continue to thrive on this planet. This course will employ lessons from diverse fields including, but not limited to, agriculture, forestry, energy production, environmental economics, domestic and international policy, ecology, resource management, and human health. The course introduces perspectives from the natural and social sciences, arts and humanities, and professional disciplines and explores how their interconnection increases the prospects for creating a more sustainable future. The course will be taught in Costa Rica at Earth University. While Costa Rica will provide many of the case examples used in the class, experts from many disciplines will provide lectures and learning opportunities from cases around the world. Specific topics to be explored include: paradigms and worldviews; agriculture, forestry, and food systems; principles of ecology, physics and economics; energy and natural resource and conservation; cultural sustainability; environmental politics and justice; ethics and religion; sustainable agriculture; conservation and preservation of ecosystems and species; and the roles of the arts; ecological connections to human health.

Credit 3 units.

Typical periods offered: Spring, Summer

PHTPS 6014 Climate Crisis: Understanding Complexity & Advocacy for Global Health Professionals

The elective course aims to provide frameworks that encourage students to engage with global discussions regarding the climate crisis as Global Public Health and Social Work professionals. This course takes a psychosocial and critical approach to examine the complexities of the links between climate crises and global health. In a fast changing domestic/international policy landscape, the next generation of leaders will need to innovate by challenging systems and processes and work across disciplines and borders to propose action that has sustainable impact and that is inclusive of diverse voices, identities, and Knowledge Systems. The course will enable students to: Decipher complex multidisciplinary challenges around interactions between Global Health (GH) and the Climate Crisis (CC). Develop strategic planning around policies and programs that are built on ethical considerations (understanding power dynamics and fostering bottom-up accountability towards the most disadvantaged populations). Develop personal and inter-personal competencies that are required for fighting climate chaos in the long term. Find strength and humility by developing a strong sense of community with their peers and work towards decolonizing Global Health and Climate Policy.

Credit 3 units.

Typical periods offered: Spring

PHTPS 6016 The Protection and Wellbeing of Displaced Children: A Colombian Case Study

This Colombian Case study involves a travel portion over approximately 10 days in collaboration with the School of Government at Los Andes University. Students will meet over zoom with Los Andes students in spring 3-4 sessions. Students will spend the majority of the time in and around Bogota with guest lectures from faculty at Los Andes University, UNICEF, Government officials and others as well as site visits to displaced communities and other at-risk populations around Bogota. Students from the Brown School and Los Andes will have the opportunity to learn, observe and reflect together on a range of issues and approaches - from high-level policies to community-led approaches to protection. During their stay, students will shadow implementing programming for children and families, and review monitoring and evaluation frameworks and other internal accountability processes. Students must apply for the course at sa.wustl.edu.

Credit 3 units.

Typical periods offered: Spring

PHTPS 6017 The Protection and Wellbeing of Displaced Children: A Colombian Case Study

This Colombian Case study involves a travel portion which will take place in May 2024 over approximately 10 days in collaboration with the School of Government at Los Andes University. Students will meet over zoom with Los Andes students in spring, 2024 for 3-4 sessions. Students will spend the majority of the time in and around Bogota with guest lectures from faculty at Los Andes University, UNICEF, Government officials and others as well as site visits to displaced communities and other at-risk populations around Bogota. Students from the Brown School and Los Andes will have the opportunity to learn, observe and reflect together on a range of issues and approaches - from high-level policies to community-led approaches to protection. During their stay, students will shadow implementing programming for children and families, and review monitoring and evaluation frameworks and other internal accountability processes. Students must apply for the course at sa.wustl.edu. There is a \$1800 course fee for Brown School students. This will cover airfare, housing, in country transportation, breakfast, insurance. Students are responsible for all costs not covered by the course fee, including travel to the airport, additional meals, personal expenses, and visa or immunizations. Travel: May 18-25, 2024. This is a summer course, but students will have zoom sessions on 3-4 Fridays in April and May 2024.

Credit 3 units.

Typical periods offered: Summer

PHTPS 6018 Translating Evidence into Policy

The purpose of this course is to introduce students to several key concepts at the interface between evidence, public health, and policy. Policies, often those outside the health sector, have well-documented, powerful, and sustained effects on population health and health equity. This course covers the epidemiologic basis, types of evidence, theories, study designs, disciplinary contributions, methods of communication, and current challenges and controversies in health policy. The course uses a problem-solving framework that embraces both vertical (cells to society) and horizontal (multiple disciplinary concepts and methods) transdisciplinary. In this course, we intentionally use multiple teaching methods and expect you to pursue various types of learning. To address real-world, contemporary public health challenges, the course content will be covered through readings, individual and team-based learning, case studies, lectures, debates, and discussions. The faculty teaching the course have diverse backgrounds, including epidemiology, policy, economics, business,

medicine, and education. We aim to develop both your practical skills (e.g., crafting an elevator speech) and your analytical skills (e.g., composing a policy paper). We expect you to take the initiative and participate actively in class discussions and debates. A goal of this course is to further develop your oral and written communication skills.

Credit 3 units.

Typical periods offered: Fall, Spring

PHTPS 6019 Applied Qualitative & Participatory Methods

This course is designed to familiarize students with the perspectives, methods, and techniques of qualitative and participatory research. The course covers both the theoretical foundations of qualitative inquiry and a variety of methods of data collection. The class will use examples from and discuss how these methods are used in global research. Student fieldwork projects, which are carried out concurrently with classroom lectures and activities, are a central part of the course. Prospective students should note that this course requires significant time spent outside of class arranging interviews and then collecting, transcribing and summarizing data.

Credit 3 units.

Typical periods offered: Spring

Psychological & Brain Sciences

PSYCH 8068 Hierarchical Linear Models

Data in the social sciences are frequently organized hierarchically: students are enrolled in courses, which exist within separate schools, which are parts of different school systems; employees work within teams within different divisions of a company; the outcomes for participants or patients in different treatment groups are measured different numbers of times and include covariates that vary over time; partners, parents, and children are parts of family units that are parts of different communities. Hierarchical data contain dependencies that preclude traditional analyses (e.g., simple analysis of variance or multiple regression), requiring instead an approach that correctly estimates error sources and identifies systematic effects at their appropriate level of influence. This course provides an introduction to the analysis of hierarchical data with an emphasis on the correct identification of models, analysis of hierarchical data with current software, proper interpretation of results, and use of appropriate diagnostic tests for model adequacy. Prerequisites: Psych 5066 and Psych 5067.

Credit 3 units.

Typical periods offered: Spring

Social Work Practice Methods

SWPM 6011 Global Mental Health

This course aims to provide participants with an in-depth understanding of the current debates that are shaping Global Mental Health (GMH) in Low and Middle Income Countries (LMICs). It examines the history of GMH, its key principles, policies and practices alongside the challenges inherent to their implementation in some of the most challenging contexts. Using practical examples of GMH

interventions in the area of stigma, depression, trauma and the mental health of marginalized populations, students will be encouraged to critically engage with concepts relevant to, social work, public health, sociology and anthropology so as to reflect on the design, applicability and relevance of such interventions. Furthermore, the course will examine several key issues inherent to the field, such as the cultural validity of modern psychiatric diagnosis, as well as its research methods and assessment techniques. Guest speakers will include individuals working on the forefront of GMH application. The course is designed to compel future social workers to think globally but act locally when debating and addressing mental health issues in an international context.

Credit 3 units.

Typical periods offered: Fall, Spring

SWPM 6044 Social Entrepreneurship

Social entrepreneurs use innovative, market-based tools and responses to solve social and environmental problems. This interdisciplinary class attracts students from all disciplines to develop an entrepreneurial mindset and skill set to apply to local and global issues. Through readings, lectures, local and international guest speakers, case studies, classroom debates, and lean startup and business model canvas techniques, students will gain meaningful insight into how to create and capture social value. Students will develop the skills to develop and pitch a social venture that fits their passions and interests in the Olin Big Idea Bounce Pitch competition that brings students together across campuses to share their ideas and compete for prize money. In addition, students will explore the role entrepreneurship and social impact investing play in the social and economic development of healthy communities both nationally and internationally.

Credit 3 units.

Typical periods offered: Fall

SWPM 6046 Social Innovation

Social innovation focuses attention on the ideas and solutions that create social value, as well as the processes through which people generate and capture them. This year's theme is community wealth building: cooperatives, collective entrepreneurship, worker-owned businesses, and trusts. Community wealth building is a bottom-up approach to economic development based on greater democratic ownership, participation, and control that we can begin to develop and scale. The goal is to create a democratic economy and displace the extractive economy. We will review the latest literature and policy documents then meet with practitioners and communities driving this work forward across our St. Louis region. We will learn and apply innovation methods like design thinking, Google sprints, and asset mapping. Graduate students from across campus (MSW, MPH, MBA, MSP, and more) will work together as teams to develop a pitch or policy brief applying community wealth building and shared prosperity approaches to the Greater St. Louis area.

Credit 3 units.

Typical periods offered: Fall

SWPM 6074 Community Based System Dynamics

This course introduces students to community based system dynamics (CBSD) as an approach for engaging communities, organizations, and trans-disciplinary teams to understand and represent complex social, health, and policy problems through the diagramming conventions of system dynamics. The course introduces students to the background and theoretical foundations of community based system dynamics; qualitative causal mapping; the practice of group model building for working with organizations, communities, and teams through structured small group exercises or "scripts"; tools for designing, facilitating, and evaluating CBSD interventions; and techniques for managing group dynamics involving power, interpersonal conflicts, and

working with marginalized stakeholders. Learning is structured around problem-based and experiential approaches, including simulated group model building exercises, facilitation practice, case study activities, and guest presentations by CBSD practitioners working in the field. The course draws on methods being developed and used by the Brown School's Social System Design Lab and explores current CBSD applications in both domestic and international settings.

Credit 3 units.

Typical periods offered: Spring

SWPM 6076 Foundations of Geographic Information Systems (GIS) for the Applied Social Sciences

This course will familiarize students with the basic knowledge of geographic information systems (GIS) and their application to social work practice and research. The course is organized around three primary areas: 1) conceptual; 2) technical; and 3) data management. A conceptual overview of GIS is presented to provide students with foundational knowledge about the theory, purpose, function, and applicability of GIS in practice and research settings. Students will develop critical thinking skills necessary to devise research questions appropriate for a GIS, to develop a GIS, interpret the findings, and to evaluate the spatial relationships between variables.

Credit 3 units.

Typical periods offered: Fall

SWPM 6077 System Dynamics Modeling for Strategic Design

This class focuses on the application of model-based systems thinking and system dynamics simulation modeling for strategy development in social work, public health, and social policy for the design of programs, interventions, and organizations. The course supports students to apply mathematical simulation modeling as a pragmatic tool for the design of program and policy interventions as well as organizational strategies. The course covers the foundations of the systems thinking perspective; problem scoping and definition; model structure formulation, the role of mixed methods to build confidence in models, and model-based analysis to inform design options. Application areas include organization and community practice, with examples from domestic and international settings. The course draws on methods being developed and used by the Brown School's Social System Design Lab and explores current CBSD applications in both domestic and international settings.

Credit 3 units.

Typical periods offered: Fall

Social Work Social Policy

SWSP 6018 Health Administration and Policy

This course provides an overview of the structure and functions of the U.S. Health Care System, the relationship between the health care delivery system and public health, and an overview of the health care policy process in the United States. The existing and evolving financing, organizational structures, and delivery systems are described along with alternatives that have been discussed and developed domestically and internationally. The course also introduces key concepts in health care management. Finally, the course provides students with the tools necessary to evaluate and analyze health policy and health care systems in the U.S.

Credit 3 units.

Typical periods offered: Fall, Spring

Social Work Theory

SWTH 6003 Health Behavior and Health Promotion

The purpose of this course is to present fundamentals of social and behavioral science as a framework for using evidence-based approaches in addressing individual, families, and population health issues. Students will learn the role of social determinants of health problems, and theoretical approaches to guide the design and evaluation of health interventions.

Credit 3 units.

Typical periods offered: Fall, Spring, Summer

Master of Public Health

Our program, accredited by the Council on Education for Public Health, is distinguished by its unique classes and course packages, outstanding research opportunities, and real-world learning experiences.

Degree Requirements

MPH Curriculum

Our two-year, 52-credit-unit degree, which is accredited by the Council on Education for Public Health, provides students with the knowledge, skills, and tools they need to take leadership in the field of public health.

Our innovative curriculum includes outstanding research opportunities, real-world learning experiences through practicum, and unique classes and course packages.

This curriculum was designed to be different. We are relentlessly focused on understanding problems and creating solutions. We transcend the boundaries of academic disciplines, teaching students to think broadly about complex public health issues.

Learn more about our distinctive approach on our MPH Curriculum webpage.

Required Courses

The list below includes the courses required to build a student's course of study. Because of the variety of concentrations offered with the MPH degree, the order in which students take their courses may vary.

Code	Title	Units
Foundations of Public Health (15 credit units)		
PHFN 5000	Epidemiology	3
PHFN 5001	Biostatistics	3
PHFN 5002	Environmental Health	3
SWSP 6018	Health Administration and Policy	3

SWTH 6003	Health Behavior and Health Promotion	3
Research Methods (9 credit units)		
PHRS 6000	Research Methods	3
PHRS 6001	Applied Linear Modeling (ALM)	3
PHRS 6002	Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)	3
Cross-Cutting Themes (1 credit unit)		
PHFN 5003	Cross-Cutting Themes in Public Health	1
Public Health Seminar (2 credit units)		
PHFN 5004	Public Health Seminar I	1
PHFN 5005	Public Health Seminar II	1
Practicum (3 credit units)		
PHFN 5010	Foundations of Applied Practice	0
PHPC 6001	Practicum I - MPH Program	3
Transdisciplinary Problem Solving in Public Health (3-6 credit units)		
To meet this requirement, students choose two 3-credit unit transdisciplinary problem-solving courses, which span a variety of topics. Some dual degree-seeking students may only take 3 credits of TPS to meet Generalist Concentration requirements.		6
Electives/Concentration (11 credit units)*		
Elective I		3
Elective II		3
Elective III		3
Elective IV		2
Skill Labs (3 credit units)		
Skill Lab I		1
Skill Lab II		1
Skill Lab III		1
Integrated Learning Experience (2 credit units)		
PHCC 6011	Capstone I	1
PHCC 6012	Capstone II	1
Total Units		52

* Students use elective credits in years one and two to earn a concentration (p. 56) or to take other graduate coursework. They can choose from a wealth of electives, including up to two additional Skill Labs, or they may pursue relevant courses from other Washington University graduate programs.

Note: The MPH curriculum and required credit units are subject to change.

MPH Concentrations

Visit the Master of Public Health page of the Bursky School of Public Health website to learn more about these concentrations.

Epidemiology/Biostatistics

The Epidemiology/Biostatistics concentration exposes students to a wide range of quantitative data analysis methods and skills. They are equipped to understand and participate in the design, analysis, and interpretation of public health studies and to effectively translate public health evidence into policy and practice.

- Curriculum schematic for the Epidemiology/Biostatistics Concentration [PDF]

Generalist

By drawing from a range of concentration competencies, Generalists dedicate their coursework to issues pertinent to their research and professional interests. To pursue these competencies, Generalists have the flexibility to learn from faculty members and complete coursework from across our established concentrations, which may include topics such as climate change, maternal and child health outcomes, health policy, nutrition, and more. Approximately one third of our MPH students choose to pursue the Generalist track and take full advantage of the program's extensive and diverse selection of courses.

- Curriculum schematic for the Generalist Concentration [PDF]

Global Health

The Global Health concentration prepares students to confront complex issues primarily impacting resource-poor populations around the world. Graduates are prepared for careers in multilateral organizations, the United States federal government, and nongovernmental organizations based in the United States and abroad.

- Curriculum schematic for the Global Health Concentration [PDF]

Health Policy Analysis

This concentration prepares students to research, analyze, and implement public health policies at local, state, and federal levels. Students will learn how to enhance the public's health by understanding the way policies are designed, implemented, analyzed,

and assessed. Graduates are prepared to work across sectors to navigate the rapidly changing world of modern health policy practice and research and to incorporate the perspectives of both consumers to providers.

- Curriculum schematic for the Health Policy Analysis Concentration [PDF]

Mental and Behavioral Health

As a leading cause of disability worldwide, mental health issues are a critical factor in population health. This concentration equips students to promote mental and behavioral health through a transdisciplinary lens. Students prepare to protect and improve the mental health and well-being of individuals, communities, and societies using public health strategies. Graduates of this concentration may pursue careers focusing on mental health prevention, research, and policy within governmental, nonprofit, and community health organizations located in both domestic and international settings.

- Curriculum schematic for the Mental and Behavioral Health Concentration [PDF]

MPH Practicum

In practicum, students will translate the theories and skills learned in the classroom into real-world practice. Our students emerge with a host of meaningful experiences bringing positive change where it is most needed, and they will have broadened the professional skills that make for strong practitioners and leaders. The issues students will engage in, as well as the personal connections they will make, will serve them throughout their careers. With more than 150 diverse partner organizations, each student will find a practicum site with a mission that aligns with their passions and goals.

At the Bursky School of Public Health, students have the unique opportunity to select their own practicum site. This self-directed process offers tremendous options and flexibility. Our students complete applied practice experiences locally, nationally, and globally. Our Office of Student Applied Practice (OSAP) provides every student the support they need to make a well-informed selection.

The Foundations of Applied Practice course taught during the student's first semester as well as consultation with OSAP faculty members helps students navigate the entire process. Faculty support students to determine their applied practice experience goals, work with students and partner organizations to identify projects and deliverables, and provide guidance throughout the practicum experience.

Office of Student Applied Practice (OSAP/APEX) Team

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Overview of MPH and Dual Practicum

The OSAP grounds our work in the values of anti-racism and equity.

We embrace diverse people, identities, ideas, and points of view to continually improve our school, region, nation, and world. We are committed to creating internal and external contexts in which outcomes are no longer predicted by identity, access to resources, or geography.

Equity is realized when the outcomes of individuals, communities, and populations are no longer impeded or predicted by identity, access to resources, or geography. The OSAP is committed to ongoing anti-racism and equity work as we engage in conversation, dialogue, and action with students, faculty, staff, organizations, and communities. Advancing equity in practicum placements requires the process of recognizing and addressing how levels of institutionalized and systemic oppression impact individuals, families, groups, organizations, and communities.

Important Terms

Applied Practice Experience (APEX)

The applied practice experience or practicum is the active engagement of students in the learning process. It requires students to critically reflect as they 1) exchange and integrate the theory, knowledge, and skills learned in the classroom with their real-world applied, practicum experiences; and 2) actively participate in the process of discovering their own career paths. Applied practice is essential in the process of educating, informing, advising, nurturing, and mentoring the development of competent public health professionals.

Applied Practice

Applied practice is a key component of public health education. Applied practice acts in accordance with the competencies developed by the governing curriculum committee and public health faculty that have been approved by the Council on Education for Public Health. Applied practice aligns with partners to have a presence throughout the community. Through partnership and collaboration, applied practice fosters opportunities for students to integrate classroom and applied practice (practicum) experiences. Students strengthen their skills and discover their short-term and long-term practice goals through reflection, reciprocity, and engaging theory in real-world settings.

OSAP/APEX Faculty

An OSAP or APEX faculty member is responsible for teaching, orienting, guiding, and assessing student progress in all areas of the applied practice experience and for maintaining close collaboration and consultation with the practicum agency. APEX faculty members have specific areas of expertise, and students will work with the APEX faculty member who aligns with their interests. APEX advisement is the process by which APEX faculty assist students with identifying, securing, preparing for, and evaluating practicum experiences. APEX advisement also includes socialization to the profession and professional development. The APEX faculty member works collaboratively with the student, the preceptor, and academic advisors to meet all competencies and practice behaviors for the practicum.

Preceptor

A preceptor is a professional with a master's degree or higher who supervises MPH and dual degree students in practicum. Preceptors must have at least two years of post-graduate experience, demonstrated expertise in practice, and a minimum of one year of employment at the practicum organization. Preceptors are responsible for facilitating student learning, monitoring and evaluating student progress, and providing weekly supervision.

Site Coordination

Site coordination ensures that the Bursky School of Public Health has an effective and continuous presence, visibility, and impact in local, national, and international communities through the expansion of learning opportunities for MPH students. For the purpose of graduating competent professionals, site coordination employs a process of identifying, developing, structuring, and monitoring educational partnerships.

Handshake

Handshake is OSAP's database that allows students to search affiliated practicum organizations, explore practicum openings, and connect with career resources.

Purpose of MPH and Dual Practicum

The practicum experience is an integral part of professional public health education. It is designed to provide authentic practice situations in which the learning that occurs in the practicum setting complements academic coursework through the practical application of theories, concepts, and specific practice behaviors for the applied practice experience – thus the term *practicum*.

The purpose of the public health practicum at the Bursky School of Public Health is threefold:

1. To provide challenging, innovative, and substantive learning experiences to students;
2. To prepare students to assume responsibilities as public health professionals exhibiting ethical and professional behavior; and
3. To ensure skilled supervision by experienced preceptors who have been affiliated with the Bursky School of Public Health based on demonstrated knowledge in practice.

Students are required to complete a total of 3 academic credit units (equivalent to 360 hours of work) in a public health practicum to graduate.

Timing of Practicum

When the practicum is scheduled and whether it is to be completed on a part-time or full-time basis (up to 40 hours a week) are contingent upon each student's educational plan. Students must complete foundation MPH courses prior to starting practicum. In addition, dual MSW/MPH students must complete their MSW Foundation practicum before starting their Dual Concentration practicum. Dual students entering the MSW program with Advanced Standing status are encouraged to begin the concentration-level practicum during the spring semester but also have the option of starting in their first semester (fall) of enrollment.

Please refer to the Required MPH and Dual Degree Coursework section below for a list of required foundation courses. Each MPH concentration has additional required courses to be completed prior to starting practicum. Please refer to the Concentration section of the Handbook for further details.

Following Bursky Public Health's suggested academic sequencing for the MPH program, most students begin the MPH practicum in the third semester (summer) after the first year of courses. Following the suggested academic sequencing for the dual degree MSW/MPH program, most dual students begin the dual degree practicum in the sixth semester (summer) after their second year of coursework.

Consult the MPH Practicum Planning Timeline below for more information.



MPH Practicum Planning Timeline											
	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Take Foundations of Applied Practice course											
Determine interest in potential sites											
Search/apply/interview											
Finalize details and start date											
Register											
Begin APEX/ practicum											

Work Authorization for International Students

Prior to beginning any practicum, *all* students on a visa must obtain the appropriate work authorization from the Washington University Office of International Students and Scholars (OISS): either a Curricular Practical Training (CPT) form with an offer verification or a J-1 form, depending on the student's visa. Each semester a student is in practicum, the CPT and J-1 forms must be completed. The forms can be obtained from the OISS.

International students are not eligible to begin working in the practicum until they have an updated I-20 that includes CPT authorization. The CPT authorization is valid only for the dates and preceptor indicated on the I-20. If the student is unable to complete the practicum prior to the expiration of the CPT, they should consult an OISS Advisor, as an extension must be authorized prior to the CPT expiration date.

Preceptor (Practicum Supervisor) Requirements

Preceptors are professionals who must have an MPH or a related master's degree or higher to supervise MPH practicum students. Preceptors must have at least two years of postgraduate experience, demonstrated expertise in public health practice, and a minimum of one year of employment at the practicum organization. Epidemiology and biostatistics preceptors must also have a substantive background in epidemiology and/or biostatistics as approved by the OSAP.

It is strongly recommended that preceptors supervise no more than three students in practicum per semester. This preceptor-student ratio (3:1) affords the preceptor the opportunity to effectively engage and supervise a manageable number of students without comprising the time needed for the preceptor to attend to their own job duties.

Task Supervisor Requirements

The Bursky School of Public Health differentiates between an affiliated preceptor and an organizational task supervisor. A task supervisor is often a staff member who assumes specific responsibilities for the student's practicum learning as delegated and monitored by the preceptor. *A task supervisor does not replace the preceptor nor can the task supervisor substitute for the preceptor in weekly supervision.* Therefore, the task supervisor is not expected to or required to meet the school's criteria for preceptor supervision and evaluation.

However, the task instructor should be informed of practicum requirements and procedures. It is the responsibility of the preceptor to help the student integrate the task supervisor's contribution into the overall learning experience.

The OSAP recognizes that, on occasion, a preceptor may be unavailable to meet with the student for weekly supervision (e.g., the preceptor is on vacation or out of town for a conference/meeting). In these instances, a task supervisor may provide weekly supervision for the student to monitor their progress and address any concerns or issues. However, this substitution is only acceptable for short-term situations. Preceptors who will be absent for supervision over an extended period of time must notify the OSAP.

Professional Behavior and Responsibilities of Students in the Applied Practice Experience

Bursky School of Public Health students are preparing to practice as competent public health professionals. Consistent with the knowledge, values, ethics, and skills of the public health profession, students in practicum are expected to adhere to the profession's values and ethics and to demonstrate professional comportment in all aspects of the practicum experience. Responsibilities of students in practicum include the following:

- Adhere to the Principles of the Ethical Practice of Public Health. (Dual MSW/MPH students must also adhere to the NASW Code of Ethics.)
- Comply with organizational policies and procedures.
- Maintain professional boundaries and behaviors with respect to the organization's clients, constituents, and staff.
- Attend and actively participate in weekly supervisory sessions, including preparing an agenda for supervision, if requested.
- Keep a timesheet of completed practicum hours and notify agency in advance when absent.
- Fulfill all the learning obligations and expectations set forth in the student's Educational Learning Agreement (ELA), including demonstrating all competencies and practice behaviors through learning activities.
- Communicate with the preceptor regarding the student's learning needs and interests, conflicts regarding supervision, and challenges developing as a professional public health practitioner.
- Participate in the mid-point site visit.
- Consult with the organization about safety and liability.
- Contact the OSAP if problems arise in the placement that may need support, clarification, and resolution.
- Assume responsibility for the submission of final required practicum documents to the OSAP to receive a practicum grade (consult the OSAP Practicum Final Documentation and Grades sections of this page).

Orientation for Students in Practicum

A successful practicum partnership between a preceptor and a student begins with a well-planned orientation program. Therefore, it is the student's responsibility to work with the preceptor to structure the orientation process. An effective orientation process can help a student quickly acclimate to their practicum setting, better understand their role in the organization, and clearly define their tasks, duties, and responsibilities in the practicum. The orientation of a student to their practicum organization and/or site should include the following:

- Adaptation to the culture and environment of the organization: tour of facility and student's workspace; review of dress code, work schedule, holiday/vacation schedules, use of phone, and travel reimbursement; resource manuals and reference materials; and so on.
- Agreement on the student's role in practicum, including the boundaries of the student's involvement in projects, meetings, or committees; persons with whom the student may consult; and the student's working title (e.g., research associate intern).
- Review of the organization's history, mission, funding sources, services, and organizational chart.
- Review of organizational policies and procedures, including the organization's stance on confidentiality, artificial intelligence, FERPA, HIPAA, and/or Human Subjects Protection, as applicable.
- Review of the organization's code of ethics, standards of professionalism, or code of conduct.
- Review of organizational procedures for documentation, record keeping, and reporting work time.
- Introduction to key administrators and staff in the organization as well as persons outside of the practicum organization with whom the student is likely to interact.
- Review of personal safety issues and training necessary to protect the well-being of the student.

Students who will be engaged in practicum tasks and duties off-site from the practicum organization (e.g., in community centers or health clinics) should also be oriented in a similar manner as indicated above to the culture, operations, and policies of the work site.

Depending on the setting, orientation and onboarding processes may include virtual or alternative methods. Students should consult with their preceptor regarding modifications in onboarding activities.

Weekly Supervision

Preceptors are required to provide one hour of weekly, individualized, face-to-face supervision to each student in practicum. Under some circumstances in which the preceptor is not available to provide in-person supervision, students may request permission from OSAP for virtual supervision. Topics discussed in supervision may include the following:

- Updates on the student's progress with tasks and projects as related to the chosen public health competencies and ELA
- Challenges/problems faced by the student
- Accomplishments/goals the student has achieved
- Issues of cultural awareness, equity, and diversity (within the organization and with clients/constituents)
- Processing of the organizational culture and policies
- Identification of training opportunities for the student
- Discussion and mentoring regarding the student's professional development and career goals
- Discussion of public health news/trends relevant to the organization's area(s) of service, the student's tasks/projects, and so on

Group Supervision

Organizations hosting more than one practicum student or other interns may choose to offer group supervision to students as a supplement to (but not in lieu of) individual supervision. Group supervision may be used to orient a group of students to the organization, to allow students the opportunity to meet other interns and coordinate student projects, or to provide a forum for guest speakers and professional development for students to enhance their practicum experience.

What Students Need to Know Before Starting Practicum

Practicum Selection

The OSAP does not assign students to practicum organizations. Students employ self-determination to identify skills and knowledge they hope to learn in the placement as well as at a practicum site. APEx faculty support students in this process. This model allows each student to consider learning experiences that contribute to professional identity; to provide a comprehensive base of theories, knowledge, and skills relevant to the individual student; and to build on the student's own personal interests and long-term career goals. The student should consider the requirements of their concentration when choosing a practicum site.

Students' Activities in Compliance With the Principles of the Ethical Practice of Public Health

The School of Public Health supports the policies of affiliated practicum organizations. However, because practicum students are not employees of these organizations, students should pay special attention to the following areas of activity in order to comply with the Principles of the Ethical Practice of Public Health. These principles

provide values and beliefs that serve as the foundation for morally responsible public health practice and should guide students in their professional behavior as agents of the organization while in practicum. Dual MPH students are also expected to abide by their professional codes of ethics as applicable.

Organizational Policies

Students are required to comply with the rules, policies, procedures, and other requirements (i.e., background checks, certifications) of the practicum organization, insofar as they pertain to the students' activities while in practicum. It is the responsibility of the student to ensure that they are informed of such policies and to discuss with their preceptor specific aspects of policies and rules that impact their practicum duties.

Lobbying Activities

Students who engage in formal lobbying activities as a part of their practicum experience should discuss with the practicum organization and OSAP the issue of registering as a lobbyist with the appropriate governmental entity. If the student and preceptor determine that registration is appropriate, the student must register as a lobbyist with the practicum organization and *not* as an agent for Washington University. It is the responsibility of the student and the organization to comply with all laws and regulations relevant to lobbying.

Sharing Sensitive Information

The OSAP will share all relevant information with appropriate persons, including (but not limited to) the student's academic advisor, their preceptor, the Associate Dean for Student Affairs, the Associate Dean of Academic Affairs, the Director of MPH Programs, and the Associate Dean for Education. Relevant information is defined as information that may have an impact on the practicum site selection, learning experience, or implementation process and that may impact clients, the practicum organization, the preceptor, or the staff. Such information will be shared to enable informed choices by preceptors, to protect students, and to facilitate the learning process. Preceptors are also expected to share relevant information with the OSAP. The student may be required by the practicum organization to sign a release of information, if relevant.

Practicum Deliverables and Work Products

While in practicum, students should operate under the following assumption: a work product produced in the course of a practicum — under the supervision, guidance, and review of representatives of the organization, using the organization's data and/or resources — is considered the property of the organization. An exception may exist when the student is provided with written permission from the organization stating otherwise. Compliance with all federal and state regulations governing copyright, HIPAA, and so on is the standard of conduct.

Remote Practicum

Under certain circumstances, remote practicum is permitted. Prior approval is needed. Interested students should communicate with APEx faculty.

Professional Liability Insurance

Washington University in St. Louis carries a primary \$2 million insurance policy per person for its various professional fields. This program covers duly registered Bursky School of Public Health students for events that may occur while performing duties in their practicum. Students can obtain proof of coverage by contacting the OSAP.

Automobile Insurance

Washington University does not provide automobile liability coverage. Students who will be using their personal vehicle or the organization's vehicle for organizational business (e.g., transporting clients, conducting home visits) should discuss required automobile coverage and/or negotiate coverage with the organization at the time of the interview.

Accommodations

Prior to beginning a practicum search, disabled students who require adjustments to equitably complete expectations in practicum should contact WashU's Disability Resources and engage in a process for determining and communicating reasonable accommodations. Because accommodations are not applied retroactively, Disability Resources recommends initiating requests prior to or at the beginning of the academic term to avoid delays in accessing accommodations once classes begin. Once established, responsibility for disability-related accommodations and access is shared by Disability Resources, APEx faculty, and the student. The student may wish to share this information with their preceptor.

WashU Disability Resources can be reached via www.disability.wustl.edu or by calling 314-935-5970.

Pre-Placement Screenings

Affiliated practicum organizations may require pre-placement screenings before students are able to start their practicum. These may include criminal background checks, child safety registry, or illicit drug screenings.

A drug screening is a screening for illicit drugs that may include but are not necessarily limited to cannabis (THC), cocaine, opiates, amphetamines, and phencyclidine (PCP). Drug screenings can be performed by BarnesCare/BJC Healthcare or at a location recommended or required by the practicum organization requesting the screening.

The student is responsible for obtaining the required screenings and all associated costs and fees.*

* On occasion, the organization requiring the check/screening will assume the cost. Students should check with the organization requiring the check/screening.

Safety and Security of Students in Practicum

The safety of students in practicum is a priority for the OSAP. If concerns about personal safety are not addressed, they can significantly impact learning opportunities in the placement. Although Washington University does not wish for students to be protected from the realities of professional practice, immersing students in the realities of practice can also expose them to safety and security risks. Should students have any safety concerns at their practicum locations, they should contact their preceptor and the OSAP.

Preceptors and practicum organizations, when applicable, are expected to do the following:

- Discuss safety and security matters with the student during the interview and throughout the practicum.
- Relay information to the student about the prevalence of or potential for violence while conducting practicum activities.
- Explain and enforce organizational safety protocols with the student, including building and office security, emergency procedures, the management of violent clients, and home visit safety procedures, as applicable.
- Provide a tour of the surrounding neighborhood/community of the practicum site and address concerns the student may have regarding work in the community or at an offsite location.
- Allow the student to observe staff engaged in the work for which the student is preparing.
- Allow the student to be observed while engaged in learning activities.
- Provide the student with security resources (e.g., safety training, cellular phones) available from the practicum organization.

Examples of activities that warrant special concern and discussion with the preceptor and the OSAP prior to beginning practicum include the following:

- Physical restraint of clients
- Transportation of clients or other persons in the student's or organization's vehicle
- Transportation of a client with a history of violent behavior
- Work in the organization at times when or in areas where other staff will not be present or the student is isolated
- Activities that may not align with regulatory guidelines (e.g., language interpretation without proper training)

Mandated Reporting

As emerging professionals, our expectation is that MPH and dual MPH students adhere to their professional codes of ethics and state law and that they report incidents of suspected neglect or abuse where required by law. However, we encourage students to discuss these situations with their preceptors to gain a full appreciation and knowledge of the reporting process. It is also recommended that students familiarize themselves with individual state laws (for where they are completing practicum and/or for where they intend to practice after graduation) that define who is a mandated reporter and provide the circumstances under which they are required to report. The Child Welfare Information Gateway's State Statutes Search is one website that may be helpful for finding applicable state laws.

Practicum Selection, Organizational Affiliation, and Preceptor Qualifications

Affiliated Practicum Organizations

A student must complete their practicum experience with an affiliated practicum organization. Affiliated practicum organizations are organizations that have been reviewed and deemed appropriate by OSAP standards and requirements to provide graduate-level public health practice and learning experiences to students.

Practicum organizations may be located in the St. Louis metropolitan area (local) or in any U.S. town or city (out of state). Students select practicum from the OSAP's database (Handshake) of affiliated practicum organizations.

Potential preceptors wishing to affiliate a new site must complete the Bursky School of Public Health Affiliation Application.

Note: Students wishing to affiliate new sites must notify their APEX faculty member as soon as they engage in conversations with the site. Because new sites must sign an Affiliation Agreement, it can take several months or longer for the agreement to be finalized by the time it goes through university legal review. A student may not accumulate practicum hours with a non-affiliated organization or under the supervision of a non-affiliated preceptor.

Practicum credit will not be awarded for hours accumulated beyond the first 40 hours (or the posted submission due date, whichever occurs first) without an approved ELA or for hours designated as volunteer hours.

If there is any question about whether a student's site and/or preceptor is affiliated, the student should contact sphapex@wustl.edu to confirm. A good rule is that, if the student cannot find the name of their site in the database, this may indicate that the site is not

affiliated; however, the location may be going through the affiliation process, it could be operating under a different name, or the search name may be slightly different from what the student enters. It is always a good idea for the student to check with the OSAP.

Criteria for Affiliation

In view of the variety of interests and the diversity of practice areas that motivate students to pursue the MPH degree at the Bursky School of Public Health, the OSAP strives to make a broad range of practicum experiences available. To be eligible for affiliation as a practicum site, an organization must complete an Organizational Application and meet the following criteria.

- Currently employ an approved preceptor
- Commitment in philosophy, policy, racial equity, and practice to the provision and delivery of public health services
- Ability to provide and commitment to providing high-quality, graduate-level public health learning opportunities that are consistent with the student's educational development
- Competent staff sufficient to maintain program services without relying on students' work
- Ability to provide the resources necessary for students to carry out assignments (e.g., telephone, desk, computer, computer software, administrative support)
- Willingness to invest necessary resources into student learning, including adequate release time for preceptors to attend Bursky School-sponsored meetings and to supervise the student (defined as sufficient time for the adequate review of the student's progress in practicum; the requirement is at least one hour of individual supervision per student per week)
- Clear differentiation between the student's role as employee and the student's role as a graduate-level learner, if the student is currently employed at the organization

The organization must have existed for a minimum of one year and have received an affiliation site visit by an OSAP staff member, when feasible. If the organization is part of a university, the organization must provide opportunities for community and/or constituent engagement.

New Practicum Site Affiliation Requests

In order to affiliate a new practicum site, students should direct their site to the Bursky School of Public Health OSAP webpage or the Director of the OSAP. Potential practicum sites should complete the Bursky School of Public Health Affiliation Application. The affiliation of practicum sites and preceptors begins with the submission of an Organizational and Preceptor Application as well as an Affiliation Agreement. The application provides an overview of an organization's mission, administration and staff, the population(s) served, the organizational structure, and the preceptor's degree, expertise, and so on. The criteria, the responsibilities of practicum organizations and preceptors, and the affiliation process are outlined below.

Students must notify the appropriate APEx faculty member that they would like to affiliate a new practicum site as soon as possible and *at least one semester prior to the planned start date*. Students must complete and submit this request by the deadline for each semester, as follows:

- November 1 for spring practicum
- April 1 for summer practicum
- July 1 for fall practicum

It can take some organizations several months or longer to sign an Affiliation Agreement due to legal reviews and the vetting process. *A request for affiliation does not guarantee a site will be affiliated. We strongly recommend that students have a secondary plan as well.*

Preceptor Qualifications

Criteria for the selection of preceptors include the following:

- A public health professional with a master's degree or higher with at least two years of experience, demonstrated expertise in practice, and employed for a minimum of one year at the practicum organization
 - Epidemiology and biostatistics preceptors must have an MPH or an extensive background/experience in epidemiology and/or biostatistics as approved by the Epidemiology/Biostatistics Concentration Chair and the OSAP.
- Ability to provide a minimum of one hour per week individual supervision
- Willingness to participate in meetings and consultation with Bursky School of Public Health representatives who monitor the student's progress and administer the practicum program
- Willingness to consult with the student on the development of an ELA and to complete the preceptor section of the ELA
- Commitment to graduate-level professional applied practice as evidenced by providing attention to individual student needs, supporting and mentoring the student's professional development, and being willing to share expertise and time with the student, as needed
- Willingness to complete and submit required practicum evaluations and documents in a timely manner and to provide feedback to the student about evaluations
- Submission of a preceptor application the semester prior to any anticipated practicum start date
- Completion, submission, and routine updating of a preceptor's application (every three years)
- *Dual MSW/MPH preceptors:* Completion of required Social Work Field Education Collaborative Trainings prior to practicum
- *Out-of-state and international preceptors:* Special consideration will be made on a case-by-case basis for the affiliation of out-of-state and international agencies and potential preceptors

Preceptor Responsibilities

The following are the responsibilities of the preceptor for practicum:

- Orienting the student to the staff, clients, culture, policies, and procedures of the organization
- Defining the role and scope of the student in practicum
- Mentoring the student in professional development
- Assisting the student in the preparation and completion of the ELA
- Providing a minimum of one hour per week of individualized supervision time
- Reviewing with the student the student's self-evaluation and completing a final evaluation to be submitted to the OSAP at the end of each semester that a student is in practicum
- Consulting with the student's APEx faculty member as needed to review the progress of the student's learning in the practicum
- Contacting the OSAP in a timely manner should any problems/concerns occur in the practicum
- Informing the OSAP of any change in contact information for the preceptor or the organization
- Informing the OSAP of any unexcused absences of the student or the preceptor during the practicum

Concentration Requirements for Practicum

Students in the MPH program are able to concentrate in one of five areas. Each concentration requires a set number of course credits as well as a pre-approved practicum experience.

Epidemiology and Biostatistics Concentration

An Epidemiology/Biostatistics concentration requires that students meet the following criteria for practicum:

- 3 credits (360 hours) of practicum
- Students must select three foundational public health competencies and three concentration-specific competencies prior to the start of practicum to address in practicum
- Epidemiology Methods and Advanced Applied Linear Modeling are required courses before starting practicum
- Practicum project should address a public health issue and involve either data collection and/or data analysis using epidemiology and/or biostatistics methods
- Must use a statistical software package for projects with a data analysis focus (e.g., SPSS, STATA, SAS, R)
- *Must be supervised by someone with an MPH or specific epidemiology and/or biostatistics training*
- Must submit a summary of the proposed practicum experience to the Epidemiology/Biostatistics chair for preapproval at least one month before starting practicum

- If affiliating a new organization, the organization must submit the Affiliation Application and Affiliation Agreement by the semester deadline for approval by the APEx faculty member
- Complete and submit a concentration-specific ELA for approval

Generalist Concentration

Students interested in a specific topic area of public health that is not addressed within one of the other concentrations or in combining competencies and skills from more than one concentration area may select the Generalist concentration. The Generalist concentration requires that students meet the following criteria for practicum:

- 3 credits (360 hours) of practicum
- Students must select three foundational public health competencies prior to the start of practicum to address in practicum
- Students must select three concentration competencies from preapproved courses from the student's Generalist Curriculum form. These competencies are approved by the Generalist chair from the form completed by the student.
- Must submit a summary of the proposed practicum experience to Generalist chair for preapproval at least one month before starting practicum
- If affiliating a new organization, the organization must submit the Affiliation Application and Affiliation Agreement by the semester deadline for approval by the APEx faculty member.
- Complete and submit a concentration-specific ELA for approval

Global Health Concentration

A Global Health concentration requires that students meet the following criteria for practicum:

- 3 credits (360 hours) of practicum
- Students must select three foundational public health competencies and three concentration-specific competencies prior to the start of practicum to address in practicum
- Successful completion of PHCC 6002 Global Health before starting practicum
- Practicum may take place in a low- or middle-income country outside the United States *or* in a U.S.-based organization that serves populations from low- or middle-income countries
- International practicum placements may be policy-, programming-, or research-oriented
- Practicum site must be affiliated before the start of practicum
- Students who are traveling outside of the United States must attend pre-departure and post-debriefing sessions for information regarding safety, recommended immunizations and health precautions, and other context-specific communications
- Must submit a summary of the proposed practicum experience to the Global Health chair for preapproval at least one month before starting practicum

- If affiliating a new organization, the organization must submit the Affiliation Application and Affiliation Agreement by the semester deadline for approval by the APEx faculty member
- Complete and submit a concentration-specific ELA for approval

Health Policy Analysis Concentration

A Health Policy concentration requires that students meet the following criteria for practicum:

- 3 credits (360 hours) of practicum
- Students must select three foundational public health competencies and three concentration-specific competencies prior to the start of practicum to address in practicum
- Health Economics is required before enrolling in practicum
- Practicum project should address health policy issues
- Must submit a summary of the proposed practicum experience to Health Policy Analysis chair for preapproval at least one month before starting practicum
- If affiliating a new organization, the organization must submit the Affiliation Application and Affiliation Agreement by the semester deadline for approval by the APEx faculty member
- Complete and submit a concentration-specific ELA for approval

Mental and Behavioral Health Concentration

A Mental and Behavioral Health concentration requires that students meet the following criteria for practicum:

- 3 credits (360 hours) of practicum
- Students must select three foundational public health competencies and three concentration-specific competencies prior to the start of practicum to address in practicum
- Fundamentals of Mental Health for Public Health and Public Mental Health are required courses prior to enrolling in practicum
- Practicum project should address a public health issue as related to mental and behavioral health issues
- Must submit a summary of the proposed practicum experience to the Mental and Behavioral Health chair for preapproval at least one month before starting practicum
- If affiliating a new organization, the organization must submit the Affiliation Application and Affiliation Agreement by the semester deadline for approval by the APEx faculty member
- Complete and submit a concentration-specific ELA for approval

Types of Practicum

One-Semester or Multi-Semester Practicum

In agreement with the preceptor, students may elect to complete practicum over a period of one, two, or three semesters. Therefore, students should plan to allocate their practicum hours on a weekly basis accordingly so that they can complete the hours for which they registered and submit the required practicum documents by the posted grade due dates at the end of the semester (consult the Registration Requirements section of this page). In a one-semester practicum or in the first semester of a multi-semester practicum, an approved copy of the ELA should be provided to the preceptor by the student. Students are required to submit *only one ELA* during their practicum experience at any one organization. The Self-Evaluation of Competencies and Performance (completed by the student), the Preceptor Final Evaluation of Practicum (completed by the preceptor), the student's timesheet (the OSAP's version), and the Student Assessment of Practicum Experience (SAPE) are due at the end of the practicum experience.

Students *may not* complete a 1-credit practicum at an organization or split practicum credits between two agencies for their required practicum placement.

Dual MSW/MPH Concentration Practicum

Students must complete 3 practicum credits (360 hours) of dual practicum that addresses both the MSW concentration and selected MPH competencies. Following the successful completion of the MSW Foundation practicum and foundational MPH coursework, the Dual practicum must be completed in the student's MSW and MPH concentration areas. All three Dual practicum credits must be completed at the same site. Students may select to complete their Dual MSW/MPH Concentration practicum and MSW Concentration practicum at the same site.

Site Requirements and Supervision for Dual MSW/MPH Practicum

Dual practicum hours can be completed in the Greater St. Louis area, out of state, or internationally, but they must be completed under the supervision of an affiliated preceptor with an MSW and/or an MPH or a related master's degree or higher (e.g., MBA, MA, MS, MD, PhD) who meets the supervision requirements of the Bursky School of Public Health and the Brown School.

Practicum at Place of Employment

The OSAP does not recommend that students complete practicum at their place of employment. However, an exception to this policy may be made to complete a practicum. Interested students should meet with an APEx faculty member to discuss this opportunity.

Students wanting to complete a practicum at their place of employment may be approved for exemption from this policy through submission of the Petition to Complete Practicum at Place of Employment Form available from the OSAP.

Out-of-State Practicum

MPH students may complete their practicum locally or in any U.S. city or town outside of the Greater St. Louis metropolitan area. Out-of-state organizations and professionals must meet the same criteria to affiliate as local practicum organizations and preceptors. Students should consult with the OSAP regarding the Bursky School of Public Health's affiliation process for new practicum organizations and preceptors.

The student must submit the same practicum documents that are required for a local practicum to the OSAP by the specified due dates:

1. Practicum Proposal Form and course registration in Workday
2. ELA
3. Submission of the Pre-Site Visit Form
4. Completion of the Midpoint Site Visit with an APEx faculty member
5. Student Self-Evaluation of Competencies and Performance
6. Preceptor Final Evaluation
7. Practicum timesheet
8. Two portfolio products
9. Student Assessment of Practicum Experience (SAPE)

Students must also comply with the OSAP's policies and procedures for out-of-state practica.

Global/International Practicum

The OSAP will continue to collaborate with the WashU Global Partnerships Office and the Brown School Global Programs Office to assess the feasibility of international practica.

A global practicum is defined as a placement that is completed in a Core Affiliated Practicum (CAP) site in a country or U.S. territory outside of the United States. Global practicum students are required to comply with all OSAP applied practice requirements, guidelines, and timelines. Students will also be required to attend to mandated competencies and practice behaviors established in the ELA and the declared area of concentration.

Students must be enrolled in one the Global Health concentration and demonstrate an interest in pursuing a career in an international field of social work and/or public health. All other students must petition for approval. Priority will be given to students in Global Health and ISSED if they are dual MSW/MPH students.

Students interested in completing an international practicum must receive approval from the OSAP. The approval for a global practicum involves a multi- step process in which students will work with faculty and staff through a guided selection process.

The following conditions must be met if students are interested in an international practicum:

- The student has consulted with the OSAP regarding the following:
 - The process and their interest in a global practicum
 - Core Affiliated Practicum (CAP) sites
 - The application form for global practica (available online)
- The student must be in good academic standing at the time of application (i.e., a cumulative GPA of 3.0 or higher, no current academic or disciplinary actions, no financial holds).
 - MPH students will have completed the prerequisite public health courses.
 - MPH/MSW dual degree students will have completed the prerequisite public health courses *and* the MSW foundation courses and foundation practicum.
- The student will have successfully completed, with a grade B or higher, at least one of the following courses before commencing the global practicum:
 - MPH, Dual MPH/MSW, individualized with international topic:
 - PHS 5656 Global Burden of Disease
 - PHCC 6002 Global Health
 - PHCC 6003 Policy, Politics & Power in Global Health
 - PHTPS 6006 Global Nutrition and the Environment: Foods Systems in a Changing World
 - PHCC 6008 Public Mental Health

Paid Practicum

A paid practicum is offered at the discretion of the practicum organization and is often contingent upon the availability of funding. There is no minimum or maximum amount of compensation a student may receive.

However, under no circumstances may the preceptor or practicum organization alter the agreed-upon ELA, contracted practicum hours, or practicum requirements as a condition of a compensated practicum without the involvement and approval of the OSAP. For accounting purposes, a student may be required to complete an organizational timesheet in addition to the Practicum Timesheet required by the OSAP.

Elective Practicum

Upon successful completion of the required MPH or Dual MPH/MSW practicum course, students may choose to complete up to 3 credits of MPH Elective Practicum as part of their general elective credits. Students may remain at the organization where they completed their required practicum placement, or they may select a new organization.

Students may not complete more than 3 elective MPH practicum credits total.

The same guidelines and requirements for MPH Practicum I apply to MPH Elective Practicum, with the following exceptions:

1. Students must register their MPH Elective Practicum in Workday so the academic advising team can verify their course credits.
 - a. 1 credit = 120 hours, 2 credits = 240 hours, 3 credits = 360 hours
 - b. Students must register for the corresponding MPH Elective Practicum course(s):
 - Elective practicum semester 1: PHPC 6004 Elective Practicum I - MPH Program
 - Elective practicum semester 2: PHPC 6005 Elective Practicum II - MPH Program (if applicable)
 - Elective practicum semester 3: PHPC 6006 Elective Practicum III - MPH Program (if applicable)
2. Students on international visas must complete the appropriate work authorization(s), such as CPT paperwork.
3. *If the student remains at the same site* with the same preceptor as their required practicum experience, the following conditions apply:
 - a. They *do* need the following:
 - i. ELA: Competencies and learning objectives may change
 - ii. Timesheet
 - iii. Portfolio products: These must be different from those produced for their original practicum, and the total number of products will vary based on the number of credits:
 1. 1 credit = One portfolio product
 2. 2-3 credits = Two portfolio products
 - iv. Student Self-Evaluation
 - v. Preceptor Final Evaluation
 - b. They *do not* need the following:
 - i. Practicum Proposal Form
 - ii. Site visit

If the student changes sites from their first required practicum experience, all of the same requirements as their first practicum (PHPC 6001 Practicum I - MPH Program or PHPC 6007 MSW/MPH Dual-Concentration Practicum I) are required:

- Registration: Practicum Proposal Form, CPT paperwork (if applicable)

Note: If a student is registered for 1 credit at a new site, they will need to find a way to demonstrate all six chosen competencies in their portfolio product(s). The Bursky School of Public Health will only require one product but will still need to be able to assess all six competencies.

Practicum Registration, Tuition Charges, and Requirements

Foundations of Applied Practice (APEX) Course

Each student is *required* to complete PHFN 5010 Foundations of Applied Practice at least one semester prior to starting practicum. This mandatory course is designed to help students prepare for applied practice work. During the course, information on practicum requirements, procedures, and practicum selection is provided. In addition to attending the mandatory course, students may consult with the OSAP to identify which types of practicum experiences may enhance their ability to obtain employment in their desired career field.

Registering for Practicum

Course Requirement

Practicum is a degree requirement, and students must register for the appropriate MPH or Dual MPH/MSW practicum course(s) in Workday to receive credit for their placement. Practicum courses are offered in the fall, spring, and summer semesters each academic year.

MPH Practicum Course Numbers

Code	Title	Units
PHPC 6001	Practicum I - MPH Program (Prerequisites: foundation MPH coursework; selected concentration-specific coursework)	1-3
PHPC 6002	Practicum II - MPH Program (Prerequisite: PHPC 6001)	1-3
PHPC 6003	Practicum III - MPH Program (Prerequisite: PHPC 6002)	1
PHPC 6004	Elective Practicum I - MPH Program (Prerequisite: PHPC 6001, 6002, and/or 6003)	1-3
PHPC 6005	Elective Practicum II - MPH Program (Prerequisite: PHPC 6004)	1-2
PHPC 6006	Elective Practicum III - MPH Program (Prerequisite: PHPC 6005)	1



PHPC 6007	MSW/MPH Dual-Concentration Practicum I (Prerequisites: foundation MPH and MSW coursework; selected concentration-specific coursework; MSW Foundation Practicum)	1-3
PHPC 6008	MSW/MPH Dual Concentration Practicum II (Prerequisite: PHPC 6007)	1-2
PHPC 6009	MSW/MPH Dual Concentration Practicum III (Prerequisite: PHPC 6008)	1
Students should register for the section of MPH or Dual MPH/MSW practicum that aligns with their concentration:		
Section 01: Epidemiology and Biostatistics		
Section 02: Generalist		
Section 03: Global Health		
Section 04: Health Policy Administration		
Section 05: Mental and Behavioral Health		
Each credit unit of MPH or dual MPH/MSW practicum equals 120 clock hours.		

Registration Requirements

Students must complete the following steps to register for practicum*:

1. Review and submit the Risk & Release Form on the BSPH Office of Education Student Resources Hub (for first practicum registration only; subsequent practicum registration will not require this step). No practicum will be approved unless this step is completed prior to practicum registration.
2. Successfully complete the Foundations of Applied Practice course at least one semester prior to practicum.
3. Complete the MPH Practicum Proposal Form, accessed through the BSPH Office of Education Student Resources Hub.
4. Register in Workday for practicum course PHPC 6001 Practicum I - MPH Program (MPH) or PHPC 7007 (Dual MPH/MSW) for the semester in which the student plans to begin their practicum (i.e., fall, spring, or summer). Students must register for the section that corresponds with their concentration.
5. Register for no more credits than can be completed in one semester (1 credit = 120 work hours). Students may not register for half credits; only full credits are allowed.
 - a. Students should calculate the number of practicum hours that they will complete in one semester (i.e., the weeks between the start date and the end date multiplied by the hours worked in practicum per week).
 - b. Students may only add or drop practicum courses via Workday for fall and spring semesters within a specified time frame as established by the Office of the University Registrar. Dates are posted on the Academic Calendar.
6. Students who are F-1 or J-1 visa holders must complete the required work authorization (visa) paperwork (CPT forms or J-1 form).

* A student may not start practicum until they are fully registered (all steps above completed) and work authorization is approved (as applicable). A student may not accumulate practicum hours at a non-affiliated organization or with a non-affiliated preceptor. Notification will be sent via email if the practicum is not approved or if a non-affiliated site or preceptor is registered. Organizations and preceptors that are approved for applied practice are listed in Handshake.

Practicum Proposal Form

Students are required to submit a Practicum Proposal Form to be approved by the Concentration chair and an OSAP faculty member. Students should complete the form specific to their concentration. The MPH Practicum Proposal Form is located on the BSPH Office of Education Student Resources Hub under MPH Forms. Forms should include detailed descriptions of the following criteria:

- Information regarding the practicum site, including how the organization and practicum is community engaged
- Information regarding the preceptor, including any relevant background experience specific to the concentration
- Tasks, long-term goals, and a description of portfolio products
- Concentration competencies to be fulfilled during practicum from the concentration competencies list
- Organization and preceptor contact information
- Course prerequisite completion

All forms must be completed and approved prior to practicum registration and the start of practicum hours. Approval or denial of the forms will be sent to students via e-mail. If denied, students will need to provide further information or choose an alternative practicum site. A student *may not* accumulate practicum hours if the concentration form is not approved.

Course Add/Withdrawals After the Add/Drop Deadline

Students should discuss course addition and withdrawal decisions with the course instructor and/or their Academic Advisor as well as Student Financial Services in advance of requesting them to determine any curricular and/or financial implications. Students who are terminated from their practicum after the drop deadline will receive a W on their transcript and have to retake their practicum requirements in a subsequent semester.

Summer Practicum Credit and Tuition Adjustment Policy

Students may enroll in up to 3 credits of practicum in a summer semester during their tenure at the Bursky School of Public Health without being charged additional tuition at the per-credit-hour rate. However, the number of credits in which a student enrolls in summer will count toward the enrollment cap of another semester. The student must be enrolled in at least 9 credit units (full-time status) in the semester to which the practicum credits are being applied.

First Summer Semester

If a student enrolls in practicum credits (up to 3) in the summer semester after their first year as a full-time student at the Bursky School of Public Health, those credits can be applied toward the previous spring semester (if room is still available within the credit cap) and/or the subsequent fall semester enrollment cap (as long as the student is enrolled in at least 9 credit units in the fall semester).

Second Summer Semester

If a student enrolls in practicum credits (up to 3) in the summer semester after their second year as a full-time student at the Bursky School of Public Health with the anticipation of graduating in August, those credits will apply toward the previous spring semester enrollment cap (as long as the student is enrolled in at least 9 credit units in the spring semester).

Summer Practicum for Dual Degree Students

Dual degree students may enroll in up to 3 credits of practicum in a summer semester during their tenure at the Bursky School of Public Health without being charged additional tuition. However, the student must work with the Office of Academic Records and Registration and Student Financial Services to determine to which semester enrollment cap the credits will be applied.

MPH/MD Students

Due to the nature of these dual degree programs, MPH/MD students are not eligible for deferred tuition in the summer.

Overview of MPH and Dual Practicum Course Assignments/Deliverables and Evaluation

Practicum assignments are designed to create a learning and evaluation plan for students' self-directed experience in the applied practice experience. Students, along with their preceptors, complete the following assignments. These assignments are used by the OSAP to understand a student's goals in their specific practicum site and to evaluate student learning based on those goals.

Educational Learning Agreement (ELA)

In consultation with their preceptors, students are required to complete and submit the appropriate ELA to the OSAP. All students must submit a concentration-specific ELA. The ELA serves as a guide to monitor the student's progress toward gaining competency during the practicum experience. Each practice behavior listed in the ELA must be linked to a selected public health competency (either foundational or concentration) and addressed during the course of the student's practicum experience. Concentration competencies on the ELA should match the student's selected competencies from their practicum proposal form. Dual degree MSW/MPH students will address all nine social work competencies and their six selected public health competencies on the ELA.

The ELA is available on Canvas as a fillable form. Once the ELA is complete, the student and their preceptor can use the electronic signature function to sign the document. To receive credit for practicum hours, the ELA must be submitted via Canvas by the specified due date or before the student completes 40 hours in practicum, whichever occurs first.

The accumulation of practicum hours may continue while the ELA is being reviewed. Students will be notified by email if revisions are required and when the ELA is approved. No credit for practicum hours will be given if an ELA is not submitted and approved according to practicum guidelines. Extensions to the ELA deadline are granted at the discretion of the APEX faculty member.

Practicum credit will *not* be awarded for hours accumulated beyond the first 40 hours (or the posted submission due date, whichever occurs first) without an approved ELA or for hours designated as volunteer hours.

Pre-Site Visit Survey and Midpoint Site Visit

An OSAP faculty member will monitor the student's progress in the practicum and conduct one site visit approximately midway through the student's entire practicum experience. The site visit can occur either on-site at the practicum site or remotely, whichever is agreed to (if the practicum location is out of state or international, the site visit will most likely be remote). It is the student's responsibility to contact the APEX faculty member to arrange a date and time for the site visit. The objectives of the site visit include the following:

- Ensuring that weekly, well-organized individual supervision sessions are occurring
- Facilitating productive educational relationships between the student and the preceptor
- Monitoring competencies through student activities, learning objectives, and behaviors
- Monitoring and facilitating the integration of course and applied practice learning
- Identifying and monitoring the public health skills being enhanced in practice
- Identifying needs and curriculum development trends from an applied practice perspective
- Strengthening Bursky School of Public Health and community relationships

Portfolio Products

Students enrolled in the Bursky School of Public Health MPH program must complete two portfolio products as part of their practicum experience. These products are required by the MPH program's accrediting body, the Council on Education in Public Health, to demonstrate attainment of the six public health competencies that students select to address in practicum. Each MPH student must select three foundational MPH competencies and three concentration competencies that will be addressed in their practicum as well as their portfolio products.

Dual degree students with the MPH Generalist Concentration will select four foundational competencies and two concentration competencies to complete in practicum. Generalist concentrators must select from the preapproved list of concentration competencies that they selected to address at the beginning of their MPH program (Generalist Concentration Form).

Students will work in conjunction with their preceptors to determine what types of portfolio products will be mutually beneficial to both the student and the practicum organization. Examples of portfolio products include the following: written assignments, projects, videos, multimedia presentations, spreadsheets, websites, posters, policy briefs, publications, photos, or other digital artifacts of learning.

Posters and reflection papers are not suitable portfolio products.

Portfolio products must be individual work products.

Documentation of Portfolio Products

Students will complete a cover page to be submitted with their portfolio products. This cover page will include the following information:

- Type(s) of product(s) being submitted
- Public health issue or problem that the product addresses along with details as to how the product involves community engagement
- Which competencies are addressed and how they are addressed in the product
- How the product will be used by the organization
- Disclosure of generative AI use (as applicable)
- E-signature from the preceptor, verifying that they approve of the product and the use of the product for reporting purposes to the Council on Education in Public Health

Students will submit their first portfolio product at the time of their midpoint site visit via Canvas. Students will submit their second portfolio product via Canvas by the last day of their practicum. Students' products will be evaluated by their APEX faculty member for demonstrating attainment of the stated competencies, and students will not receive a final grade for practicum until their assignments have been approved by the APEX faculty member.

Student Self-Evaluation of Competencies and Performance

No later than two weeks prior to the anticipated ending date of the practicum, students should complete the Student Self-Evaluation of Competencies and Performance, which is available on Canvas. The self-evaluation should be completed two weeks prior to the end of an entire practicum experience at any one agency. The preceptor will be emailed a copy of the self-evaluation upon completion. In the self-evaluation, students are asked to evaluate each competency from the ELA based on the following five-point scale:

5 = Advanced (consistently exceeds expectations)

4 = Proficient (consistently demonstrates ability)

3 = Developing

2 = Beginner

1 = Does not demonstrate

Preceptor Final Evaluation of Practicum

After reviewing the student's self-evaluation, the preceptor completes the Preceptor Final Evaluation of Practicum. The link to the evaluation and instructions for completing it will be provided to the preceptor via e-mail after the student's self-evaluation has been submitted. In the evaluation, the preceptor evaluates the student's performance

of each competency based on the same scale used for the student's self-evaluation. The preceptor also evaluates the student's overall practicum performance based on several professional development areas. Preceptors are required to complete their evaluation and review it with the student at the end of the entire practicum experience.

Practicum Timesheet

Students are required to document all hours accumulated during practicum on the OSAP's Practicum Timesheet, which is available on Canvas. Completion of the Practicum Timesheet is governed by the Bursky School of Public Health's policies regarding Academic and Professional Integrity. *No more than 40 hours per week may be accumulated in practicum, except when the student is completing an international practicum.*

Completed timesheets must be monitored by the preceptor, signed by the student and the preceptor (after review of the student's self-evaluation and the preceptor's evaluation), and submitted to the OSAP at the end of the entire practicum experience. This timesheet does not circumvent the organization's time-reporting mechanism.

Student Assessment of Practicum Experience (SAPE)

Students are encouraged to thoughtfully and critically assess and evaluate their practicum experience by completing the SAPE survey at the end of their practicum. This survey can be found via a link emailed to students upon completion of their self-evaluation. Preceptors have requested this feedback to improve their effectiveness as mentors and to enhance the likelihood that their organization will be a desirable site for future practicum students.

Because some of the information students share may be sensitive, all demographic information is removed from the assessments prior to distribution, and assessment reports are not distributed until at least one semester after the student's experience and after a grade has been assigned. In this way, the OSAP ensures that student feedback will not impact the practicum experience or grade.

Student Evaluation

Evaluation is viewed as a continuous process occurring throughout the course of the practicum experience, a necessary aspect of public accountability, and, hence, a necessary part of public health practice. The Student Self-Evaluation of Competencies and Performance is completed by the student and provided to the preceptor two weeks prior to the completion of all practicum hours at any one organization where the student is in practicum. Following the review of the student's self-evaluation, the preceptor must complete and submit online their evaluation of the student's performance using the Preceptor Final Evaluation of Practicum. Both of these evaluations provide important feedback regarding the student's progress and professional aptitude in the practicum.

OSAP Practicum Final Documentation

Grades are determined by the student fulfilling all of the specified criteria outlined in the practicum syllabi, including both assignments and practicum responsibilities. The following documents are required for a practicum grade:

1. ELA signed by student and preceptor
2. Completion of the Pre-Site Visit Form and a Midpoint Site Visit with APEX faculty
3. Student Self-Evaluation (accessed through Canvas)
4. Preceptor Final Evaluation (accessed through Canvas/email)
5. Timesheet that has been completed, signed by student and preceptor, and submitted to Canvas
6. Two portfolio products with completed and signed cover pages (student and preceptor signatures) and submitted to Canvas

If a student registers for more than one semester at one agency, the grade of IP (In Progress) will appear on the transcript until all hours are agreed upon and all required documents have been completed. The final grade will be posted upon the completion of all hours and the submission of all required documents to Canvas.

Practicum Grades and Incomplete Policy

Final Grades

Final practicum grades are HP# (High Pass), P# (Pass), or F# (Fail). If the grade is F#, the student must re-register and pay for the required practicum credits. No credit for previously accrued practicum hours will be counted. The grading criteria for practicum is below:

- High Pass:
 - ELA is completed by the deadline.
 - ELA includes clear learning activities that align with the student's practicum context.
 - Portfolio products assess and reflect competency development.
 - Student Self-Evaluation is completed by the deadline.
 - Preceptor Final Evaluation indicates excellence in practicum.
 - Preceptor Final Evaluation is completed in a timely manner.
- Pass:
 - ELA is completed by the deadline (points taken off for late ELAs).
 - ELA includes clear learning activities that align with the student's practicum context.
 - Portfolio products assess and reflect competency development (points taken off for unclear competency assessment).

- Student Self-Evaluation is completed by the deadline (points taken off for late evaluations).
- Preceptor Final Evaluation indicates satisfactory practicum.
- Preceptor Final Evaluation is completed in a timely manner.
- Fail:
 - ELA, portfolio products, and/or evaluations are turned in late.
 - Portfolio products do not demonstrate selected competencies.
 - Preceptor Final Evaluation indicates a fail.

Incomplete Course Policy

An interim placeholder of I (Incomplete) is used by an instructor when a student experiences an extenuating circumstance that prevents the completion of the course requirements by the conclusion of the semester.

- APEx faculty and students must first discuss an I (Incomplete) grade.
- If an Incomplete is agreed upon, a faculty member will submit an I grade for that semester.
- A Practicum Support Plan crafted by the APEx faculty member and student is encouraged.
- Students have 60 days from when semester grades are due, or the date the instructor sets (whichever comes first), to complete any outstanding work and submit it to their faculty member. Due to the nature of applied learning that occurs in a practicum education course, the Bursky School of Public Health anticipates that the APEx faculty will set a feasible date in collaboration with the preceptor and that will allow for the successful completion of student deliverables. This date may likely fall within 15 to 30 days from when the semester grades are due.

Timeline for Satisfying Course Requirements

At the deadline, whatever work is completed will be graded, and any work not submitted will receive a zero. An appropriate grade will be assigned on the basis of the submitted work, with full acknowledgment that the final grade may be an F.

Incompletes and Restricted Registration/Enrollment

- Students with two or more incomplete grades who are enrolled in practicum are required to be on a Practicum Support Plan in collaboration with their APEx faculty member. In addition, students are only allowed to be enrolled in 1 credit of practicum until at least one of the incompletes is satisfied.

- Students cannot start a new semester with ≥ 7 credits of Incompletes; the deadline to have fewer than 7 Incomplete credits is 11:59 p.m. on the Friday of the first week of the new semester.
- If the student's number of Incompletes does not fall below 7 credits by the deadline, the Registrar's Office will withdraw the student from all semester courses.

Safety in Practicum

Sexual Harassment and/or Assault

If a practicum student is a victim of sexual discrimination, harassment, or violence, the Bursky School of Public Health encourages that student to speak with someone about the incident as soon as possible. The student should understand that, if they choose to speak to OSAP faculty, OSAP must report their disclosure to the department chair, the dean, or the Gender Equity and Title IX Compliance Office, which may trigger an investigation into the incident. Students may also reach out to the Relationship & Sexual Violence Prevention (RSVP) Center to discuss their rights and options with individuals who are not mandatory reporters.

Resources for Students

WashU provides a wealth of support services that address academic, personal, and professional needs. To start exploring resources that can help students along the way, please visit the Resources to Support Students in the Classroom page of the Office of the Provost website.

Additional Issues or Concerns

If a student feels that they need additional supports in order to be successful in their time at the Bursky School of Public Health, beyond the mentioned accommodations, they should contact their Academic Advisor or the BSPH Associate Dean for Student Affairs. These individuals can assist students with navigating a myriad of concerns.

Problems in MPH and Dual Practicum

There are occasions when problems arise during the practicum that involve the site and that affect the practicum experience. It is crucial that any problems or concerns associated with the site, the preceptor, or the practicum organization are brought to the attention of the student's APEx faculty member as soon as they become apparent. Only in this way will the student and the preceptor have the full opportunity to initiate timely corrective steps to resolve the issues, including those described in the following sections.

Unsatisfactory Practicum Experience

All affiliated practicum organizations are expected to provide high-quality placements and appropriate supervision to students. These expectations are communicated through the affiliation process. If a student feels that they are receiving an unsatisfactory practicum experience, that student should contact their APEx faculty member immediately so that a strategy to provide a satisfactory experience can be developed.

Practicum Support Plan

When challenges arise in the placement on the part of the student, the preceptor, or both, the OSAP may recommend the use of a Practicum Support Plan (PSP) to assist with addressing these challenges. The PSP can be initiated by the student, the preceptor, or the APEx faculty member and completed by the preceptor and the student. The PSP can be done in conjunction with the APEx faculty member, and it should be signed by the student, the preceptor, and the APEx faculty member. It must contain the following information:

- Describe and provide a narrative of the identified concern/challenge.
- Describe previous attempts to address the concern, including educational feedback, increased supervision, changes in the ELA, or other interventions.
- Describe a plan for resolution, including specific deadlines, clearly stated objectives for all involved parties (e.g., student, preceptor, task supervisor) and their subsequent responsibilities, and what measures of success will be used to determine if the PSP is successful.

A copy of the PSP must be provided to the student, the preceptor, and the APEx faculty member. The APEx faculty member should be kept informed of any placement-related challenges involving the student and the preceptor and may become directly involved at any point in the process. If challenges continue after the implementation of the PSP and it appears that a failing grade will be the resulting occurrence, communication and/or a meeting between the student, the preceptor, and APEx faculty member will be scheduled. Depending on the seriousness of the situation, the Director of Student Applied Practice may be included in the resulting communication and/or meeting.

Student Termination from Practicum

If the PSP is initiated by the preceptor to address problematic student behavior and the student's behavior does not improve, consultation between the student, the preceptor, and the APEx faculty member will take place, and the student may be terminated from practicum. A student may not be terminated from practicum or choose to terminate practicum without prior approval from the OSAP. The APEx faculty

member will consult with the student and the preceptor regarding the specifics and requirements of the termination and initiate the process. The following is an example of what courses of action a student may expect:

- An automatic referral to the Academic Integrity Committee due to unprofessional or unethical behavior on the part of the student
- A grade of F (Fail), which indicates that the student may not begin another practicum until the Academic Integrity Committee has recommended action for the student
- Required approval from the OSAP for plans to begin a new practicum
- A student may also be removed or terminated from practicum for the following reasons:
 - Failure to meet the academic and behavioral standards of the policies and procedures of the practicum (as outlined in the student handbook) or violation of the practicum organization's policies and procedures
 - Failure to disclose critical background information on application forms or in practicum interviews

Unanticipated Circumstances

Some problems that occur during practicum are due to changes beyond the student's or preceptor's control. Examples include changes with the preceptor (e.g., the preceptor leaves or is terminated), changes within the organization (e.g., internal restructuring, loss of funding), or changes in the student's personal life (e.g., student illness, death in the family). The student and/or the preceptor are required to notify the APEx faculty member as soon as possible when circumstances necessitate a change in supervision or if a practicum must be terminated. A student may also be removed from the placement due to the following:

- The decision of the OSAP and/or the recommendation of the APEx faculty member that the organization is not meeting the outlined learning objectives of the ELA
- The practicum organization or preceptor fails to demonstrate commitment to the Bursky School of Public Health applied practice experience program requirements
- Failure of the preceptor to provide consistent supervision over the student's learning experiences and activities
- The student's personal safety is jeopardized by continuing in practicum

Change in Preceptor

Whenever possible, the preceptor or organizational representative (in the event that the preceptor is no longer employed by the organization or otherwise incapacitated) is encouraged to explore all options that might allow the student to remain at the practicum site under different preapproved supervision. If another professional from the organization is available to replace the preceptor, that individual must complete the affiliation paperwork. The OSAP will only approve a supplemental

supervisor in this case if the proposed professional is able to meet the requirements for affiliation. The OSAP will work with the practicum organization to determine an alternative plan for supervision on a case-by-case basis.

Student-Requested Termination of Practicum

Students may request the Petition to Terminate Practicum Form, which must be signed by the student, the preceptor, and the OSAP. A review of the practicum situation is completed by the APEx faculty member. A review does not end a practicum experience until approval is granted. If the approval for termination is granted, the student may receive a grade for the hours completed if they are equal to at least one credit (120 work hours). Students who have accumulated fewer than 120 practicum hours will be expected to complete all required hours in their next practicum.

Incident Reporting

Washington University is not in a position to take action against incidents involving students that occur off-site, but the Bursky School will assist students with documenting any incidents in which they are involved (consult the Safety in Practicum section of this page). Students, preceptors, and/or APEx faculty members can use the Practicum Incident Reporting Form to document the details of the incident and to assist with determining the action to be taken. The form is available for students and preceptors by request from the OSAP. This form should be completed in addition to the reporting documents required by the practicum organization/site, Washington University, the Bursky School of Public Health, or other investigating officials; it in no way substitutes for the forms, policies, or procedures that are required by any parties affected by or responding to the incident. Completed forms should be returned to the student's APEx faculty member.

Practicum Incident Reporting Form

In order to have a more comprehensive and ongoing assessment of student personal risk issues in practicum and to initiate risk management planning, students are asked to complete the Practicum Incident Reporting Form if they experience any personal threat or assault or any risk of personal threat or assault for any incidents related to practicum. This form is available by request from the OSAP. This form in no way substitutes for the forms, processes, or actions used by the practicum organization, the Bursky School of Public Health, Washington University, or other authorities responding to an incident.

It is essential for MPH students or candidates to recognize that practicum is considered a course. To progress in the program, students must maintain a level of academic progress and performance that meets the established standards of the Bursky School of Public Health. Those who neglect their practicum attendance or who fail to

consistently show up at their assigned practicum placement site are taking the chance of receiving a failing grade, which can jeopardize their academic standing and/or potentially lead to the loss of financial aid or other consequences.

Required MPH and Dual Degree Coursework

As approved by the OSAP and the MPH program, the prerequisites for all MPH and dual MPH/MSW practicum students are as follows:

Code	Title	Units
PHFN 5000	Epidemiology	3
PHFN 5001	Biostatistics	3
PHFN 5003	Cross-Cutting Themes in Public Health	1
PHFN 5010	Foundations of Applied Practice	0
PHRS 6000	Research Methods	3

Students must also complete one of the following courses:

Code	Title	Units
PHFN 5002	Environmental Health	3
PHRS 6002	Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)	3
SWSP 6018	Health Administration and Policy	3
SWTH 6003	Health Behavior and Health Promotion	3

Additional prerequisites for the different concentrations and for the Dual MSW/MPH program are listed in the following sections:

Epidemiology and Biostatistics Students

Students must complete all of the above, plus the following:

Code	Title	Units
PHCC 6000	Epidemiology Methods	3
PHRS 6003	Advanced Applied Linear Modeling	3

Generalist Students

- Foundational courses as listed above

Global Health Students

Students must complete all of the above, plus the following:

Code	Title	Units
PHCC 6002	Global Health	3

Health Policy Analysis Students

Students must complete all of the above, plus the following:

Code	Title	Units
PHCC 6004	Health Economics	3

Mental & Behavioral Health Students

Students must complete all of the above, plus the following:

Code	Title	Units
PHCC 6007	Fundamentals of Mental Health for Public Health	3
PHCC 6008	Public Mental Health	3

Dual MSW/MPH Students

- Foundational public health and social work courses
- Any MPH coursework required by the student's social work concentration
- The following courses:

Code	Title	Units
SWFN 5052	MSW Integrative Foundation Field Seminar	1
SWFN 5051	MSW Foundation Practicum I	1-3
SWFN 5053	MSW Foundation Practicum II (As applicable)	1-3
SWFN 5054	MSW Foundation Practicum III (As applicable)	1-2

Additional Academic Requirements

The student must be in good academic standing with a 3.0 cumulative GPA or higher, have successfully completed all relevant prerequisite courses, and have fewer than 7 credits of incomplete coursework (as described above).

A student earning a grade of C+ or lower in any foundational course will automatically be placed on a Practicum Support Plan for the first credit of practicum (120 hours) to ensure successful transition to the applied practice experience and to facilitate support from the OSAP.

MPH Dual Degrees

Students pursuing the Master of Public Health degree at the Bursky School of Public Health have the opportunity to earn that degree in combination with one of the following degrees from the top-ranked schools of Washington University:

- Public Health and Social Work (MPH/MSW) (p. 75)
- Public Health and Medicine (MPH/MD) (p. 76)
- Public Health and Business (MPH/MBA) (p. 77)
- Public Health and Anthropology (MPH/PhD in Anthropology) (p. 77)
- Public Health and Law (MPH/JD) (p. 78)
- Public Health and Architecture (MPH/MArch) (p. 79)

Note: To enter a dual degree program, students must apply to each school separately and be admitted to both.

For more information about any of these programs, contact Bursky School of Public Health Admissions.

MPH/Master of Social Work (MSW)

Students in the MPH/MSW program earn a Master of Public Health (MPH) degree from Bursky School of Public Health and a Master of Social Work (MSW) degree from the Brown School. This dual degree integrates public health, social justice, and policy to address complex relationships on local, state, national, and international scales.

The program of study requires the completion of 86 credit units, typically taken over the course of three years. Dual MPH/MSW students must choose an MSW concentration within the Brown School and must declare the MPH Generalist concentration within Bursky School of Public Health.

Note: To enter a dual degree program, an applicant must apply to each school separately and be admitted to both.

Required MSW Courses

Specific requirements for the MSW degree can be found on the Degree Requirements tab of the Master of Social Work page of this Bulletin. Students complete three 1-credit skill labs to meet the MSW requirement for Leadership & Management. These skill labs, Research Methods and 3 credits of Dual Practicum count toward both degrees. Students should work with their academic advisors to be sure they are meeting all requirements for both degrees.

Required MPH Courses

The list below includes courses required to build a student's course of study. The order in which students take their courses may vary.

Code	Title	Units
Foundation Courses (15 credit units)		
PHFN 5000	Epidemiology	3
PHFN 5001	Biostatistics	3
PHFN 5002	Environmental Health	3

SWSP 6018	Health Administration and Policy	3
SWTH 6003	Health Behavior and Health Promotion	3
Research Methods (9 credit units)		
PHRS 6000	Research Methods	3
PHRS 6001	Applied Linear Modeling (ALM)	3
PHRS 6002	Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)	3
Cross-Cutting Themes (1 credit unit)		
PHFN 5003	Cross-Cutting Themes in Public Health	1
Public Health Seminar (2 credit units)		
PHFN 5004	Public Health Seminar I	1
PHFN 5005	Public Health Seminar II	1
Practicum (3 credit units)		
PHFN 5010	Foundations of Applied Practice	0
PHPC 6007	MSW/MPH Dual-Concentration Practicum I	3
Concentration Courses (9 credit units)		
Students will take three 3-credit courses to fulfill Generalist Concentration requirements, one of which must be a Transdisciplinary Problem Solving course		9
Skill Lab (3 credit units)		
Students complete three 1-credit skill labs to meet the MSW requirement for Leadership & Management.		
Integrated Learning Experience (2 credit units)		
PHCC 6011	Capstone I	1
PHCC 6012	Capstone II	1
Total Units		41

For more information, please visit the Admissions FAQ page or the MPH/MSW page of the WashU Bursky Public Health website.

Note: The MPH curriculum and required credits are subject to change.

MPH/Doctor of Medicine (MD)

The MD/MPH dual degree program is designed to train physicians with the knowledge and skills needed to recognize, analyze and address health problems at a population level. Students learn to identify the social, economic, environmental and cultural determinants of health, and they prepare to apply evidence-based approaches to disease prevention, health promotion and health policy.

This program is available exclusively to current Washington University School of Medicine students pursuing their Doctor of Medicine degree. Students in this dual degree program earn a Master of Public Health degree with 41 credits* from the Bursky School of Public Health with one additional year of study.

* The Bursky School of Public Health recognizes 1 credit from a Public Health approved course at WashU School of Medicine to bring the total for the MPH to 42 credit units.

Required MPH Courses

The list below includes the courses required to build a student's course of study.

Code	Title	Units
Foundations of Public Health (15 credit units)		
PHFN 5000	Epidemiology	3
PHFN 5001	Biostatistics	3
PHFN 5002	Environmental Health	3
SWSP 6018	Health Administration and Policy	3
SWTH 6003	Health Behavior and Health Promotion	3
Research Methods (9 credit units)		
PHRS 6000	Research Methods	3
PHRS 6002	Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)	3
PHRS 6003	Advanced Applied Linear Modeling	3
Cross-Cutting Themes (1 credit unit)		
PHFN 5003	Cross-Cutting Themes in Public Health	1
Public Health Seminar (2 credit unit)		
PHFN 5004	Public Health Seminar I	1
PHFN 5005	Public Health Seminar II	1
Practicum (3 credit units)		
PHFN 5010	Foundations of Applied Practice	0
PHPC 6001	Practicum I - MPH Program	3
Transdisciplinary Problem Solving in Public Health (3 credit units)		
To meet this requirement, students will select one 3-credit-unit transdisciplinary problem-solving course from a list that spans a variety of topics.		3
Generalist Concentration Course (3 credit units)**		
To meet this requirement, students will select one 3-credit-unit course from a curated list of Generalist Concentration Approved Courses.		3
Skill Labs (3 credit units)		
To meet this requirement, students will select three 1-credit-unit Skill Labs, which span a variety of topics.		3
Integrated Learning Experience (2 credit units)		
PHCC 6011	Capstone I	1
PHCC 6012	Capstone II	1
Total Units		41

****MD/MPH students take Advanced Applied Linear Modeling, an approved TPS course, and an approved Generalist course, for the required 9 credits of Generalist concentration coursework.**

Additional Information

For more information, please visit the Admissions FAQs page or the MPH/Doctor of Medicine (MD) page of the WashU Bursky Public Health website.

Note: The MPH curriculum and required units are subject to change.

MPH/Master of Business Administration (MBA)

Students from this program earn a Master of Public Health degree from the Bursky School of Public Health and a Master of Business Administration degree from Olin Business School. The program of study requires the completion of 95 credit units taken over the course of three years: 43 credit units of MPH and 52 credit units for the MBA.

Graduates with the dual MPH/MBA degree will have the interdisciplinary functional and critical-thinking skill set needed for distinctive impact and leadership in hospitals and pharmaceutical firms, health care consulting, policy think tanks, public administration, and other management roles across the healthcare industry spectrum.

Note: To enter a dual degree program, an applicant must apply to each school separately and be admitted to both.

Required MPH Courses

The list below includes courses required to build a student's course of study. The order in which students take their courses may vary.

Code	Title	Units
Foundations of Public Health (15 credit units)		
PHFN 5000	Epidemiology	3
PHFN 5001	Biostatistics	3
PHFN 5002	Environmental Health	3
SWSP 6018	Health Administration and Policy	3
SWTH 6003	Health Behavior and Health Promotion	3
Research Methods (9 credit units)		
PHRS 6000	Research Methods	3
PHRS 6001	Applied Linear Modeling (ALM)	3
PHRS 6002	Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)	3

Cross-Cutting Themes (1 credit unit)		
PHFN 5003	Cross-Cutting Themes in Public Health	1
Public Health Seminar (2 credit units)		
PHFN 5004	Public Health Seminar I	1
PHFN 5005	Public Health Seminar II	1
Practicum (3 credit units)		
PHFN 5010	Foundations of Applied Practice	0
PHPC 6001	Practicum I - MPH Program	3
Concentration Courses (9 credit units)		
Students will take three 3-credit unit courses to fulfill Generalist Concentration requirements, one of which must be a Transdisciplinary Problem-Solving course		9
Skill Lab (2 credit units)		
Skill Lab I		1
Skill Lab II		1
Integrated Learning Experiences (2 credit units)		
PHCC 6011	Capstone I	1
PHCC 6012	Capstone II	1
Total Units		43

Additional Information

For more information, please visit the Admissions FAQ page or the MPH/MBA page of the WashU Bursky Public Health website.

Note: The MPH curriculum and required credits are subject to change.

MPH/Doctor of Philosophy in Anthropology (PhD)

This dual degree program is available exclusively to current Washington University in St. Louis students pursuing a PhD in Anthropology. Students in this program earn a Master of Public Health degree from the Bursky School of Public Health with one additional year of study.

With shared interest in the environmental, biological, cultural and political implications of health outcomes, anthropology and public health have long been intertwined when it comes to solving issues of population health and well-being. The MPH/PhD dual degree program is designed for current Washington University Anthropology PhD students whose research is framed by a population health focus. By integrating a public health perspective into their degree program, students will be equipped with the specific skills and practice-based knowledge that will expand their capacity for studies of the environmental, social and cultural aspects of human society. Visit the Department of Anthropology for more information.

Note: To enter a dual degree program, an applicant must apply to each school separately and be admitted to both.

Required MPH Courses

The list below includes courses required to build a student's course of study. The order in which students take their courses may vary.

Code	Title	Units
Foundations of Public Health (15 credit units)		
PHFN 5000	Epidemiology	3
PHFN 5001	Biostatistics	3
PHFN 5002	Environmental Health	3
SWSP 6018	Health Administration and Policy	3
SWTH 6003	Health Behavior and Health Promotion	3
Research Methods (9 credit units)		
PHRS 6000	Research Methods	3
PHRS 6001	Applied Linear Modeling (ALM)	3
PHRS 6002	Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)	3
Cross-Cutting Themes (1 credit unit)		
PHFN 5003	Cross-Cutting Themes in Public Health	1
Public Health Seminar (2 credit units)		
PHFN 5004	Public Health Seminar I	1
PHFN 5005	Public Health Seminar II	1
Practicum (3 credit units)		
PHFN 5010	Foundations of Applied Practice	0
PHPC 6001	Practicum I - MPH Program	3
Concentration Courses (9 credit units)		
Students will take three 3-credit unit courses to fulfill Generalist Concentration requirements, one of which must be a Transdisciplinary Problem-Solving course		9
Skill Lab (2 credit units)		
Students will take two 1-credit unit Skill Labs		2
Integrated Learning Experience (2 credit units)		
PHCC 6011	Capstone I	1
PHCC 6012	Capstone II	1
Total Units		43

Additional Information

For more information, please visit the Admissions FAQ page or the MPH/PhD in Anthropology page of the WashU Bursky Public Health website.

Note: The MPH curriculum and required credits are subject to change.

MPH/Juris Doctor (JD)

Students in this program earn a Juris Doctor (JD) degree from Washington University Law and a Master of Public Health (MPH) degree from the Bursky School of Public Health. The program of study requires the completion of 120 credit units, typically taken over the course of four years.

The JD/MPH joint degree program prepares students to recognize, analyze and address urgent legal, health, and socioeconomic issues affecting individuals, communities, and societies.

By learning about law and public health frameworks, JD/MPH program graduates are equipped with a unique set of skills to bring evidence-based recommendations to policy, judicial opinion, and legal representation. Our students enter careers dedicated to making significant change by addressing health inequities and disparities. Visit the Washington University Law website for more information.

Note: To enter a dual degree program, an applicant must apply to each school separately and be admitted to both.

Required MPH Courses

The list below includes courses required to build a student's course of study. The order in which students take their courses may vary.

Code	Title	Units
Foundations of Public Health (15 credit units)		
PHFN 5000	Epidemiology	3
PHFN 5001	Biostatistics	3
PHFN 5002	Environmental Health	3
SWSP 6018	Health Administration and Policy	3
SWTH 6003	Health Behavior and Health Promotion	3
Research Methods (9 credit units)		
PHRS 6000	Research Methods	3
PHRS 6001	Applied Linear Modeling (ALM)	3
PHRS 6002	Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)	3
Cross-Cutting Themes (1 credit unit)		
PHFN 5003	Cross-Cutting Themes in Public Health	1
Public Health Seminar (2 credit units)		
PHFN 5004	Public Health Seminar I	1
PHFN 5005	Public Health Seminar II	1
Practicum (3 credit units)		
PHFN 5010	Foundations of Applied Practice	0
PHPC 6001	Practicum I - MPH Program	3
Concentration Courses (9 credit units)		

Students will take three 3-credit unit courses to fulfill Generalist Concentration requirements, one of which must be a Transdisciplinary Problem-Solving course		9
Skill Labs (2 credit units)		
Students will take two 1-credit unit courses to fulfill Skill Lab requirements		2
Integrated Learning Experience (2 credit units)		
PHCC 6011	Capstone I	1
PHCC 6012	Capstone II	1
Total Units		43

Additional Information

For more information, please visit the Admissions FAQ page or the MPH/JD page of the WashU Bursky Public Health website.

Note: The MPH curriculum and required credits are subject to change.

MPH/Master of Architecture (MARCH)

Students in this program earn two professional degrees: the Master of Public Health (MPH) from the Bursky School of Public Health and the Master of Architecture (MARCH) from Sam Fox School of Design and Visual Arts.

The built environment is a key factor in public health outcomes, including injury prevention, obesity, climate change, and natural disasters. Architects are looking at new ways to enhance health as they design environments that promote physical, mental, and social well-being through buildings, neighborhoods, and cities. This transdisciplinary approach ensures that architecture and public health professionals are responsive to the needs and societal changes impacting communities, institutions, and individuals by transforming communities at the intersection of complex public health issues and the built environment.

The MARCH/MPH program requires 139 units for those entering the three-year MARCH program (i.e., those without a bachelor's degree in architecture) and 109 units for those admitted to the two-year MARCH program. Students begin their MARCH coursework at the Sam Fox School and begin their MPH in Year 2 or 3, depending on which MARCH program they are following. 9 Sam Fox credits are applied to the MPH. Students spend three semesters prime to the Bursky School of Public Health.

Note: To enter a dual degree program, an applicant must apply to each school separately and be admitted to both.

Required MPH Courses

The list below includes courses required to build a student's course of study. The order in which students take their courses may vary.

Code	Title	Units
Foundations of Public Health (15 credit units)		
PHFN 5000	Epidemiology	3
PHFN 5001	Biostatistics	3
PHFN 5002	Environmental Health	3
SWSP 6018	Health Administration and Policy	3
SWTH 6003	Health Behavior and Health Promotion	3
Research Methods (9 credit units)		
PHRS 6000	Research Methods	3
PHRS 6001	Applied Linear Modeling (ALM)	3
PHRS 6002	Planning, Implementation, & Evaluation Evidence-Based Programs & interventions (PIE)	3
Cross-Cutting Themes (1 credit unit)		
PHFN 5003	Cross-Cutting Themes in Public Health	1
Public Health Seminar (2 credit units)		
PHFN 5004	Public Health Seminar I	1
PHFN 5005	Public Health Seminar II	1
Practicum (3 credit units)		
PHFN 5010	Foundations of Applied Practice	0
PHPC 6001	Practicum I - MPH Program	3
Concentration Courses (9 credit units)		
Students will take three 3-credit unit courses to fulfill Generalist Concentration requirements, one of which must be a Transdisciplinary Problem-Solving course		9
Skill Labs (2 credit units)		
Students will take two 1-credit unit courses to fulfill Skill Lab requirements		2
Integrated Learning Experience (2 credit units)		
PHCC 6011	Capstone I	1
PHCC 6012	Capstone II	1
Total Units		43

Additional Information

For more information, please visit the Admissions FAQ page or the MPH/MARCH page of the WashU Bursky Public Health website.

Note: The MPH curriculum and required credits are subject to change.

3-2 MPH Program

The 3-2 MPH program is designed specifically for Washington University undergraduate students, allowing them to earn both an undergraduate degree and a Master of Public Health in a total of five years.

What is Public Health?

The healthcare system is rapidly changing, and there is a growing need for healthcare providers, researchers, administrators, and policymakers equipped with a systems-based understanding of health determinants and outcomes.

The Master of Public Health program offers graduate students social, economic, environmental, and cultural perspectives toward health. Students apply evidence-based approaches to create multifaceted solutions in areas such as epidemiology, health policy and management, and health promotion.

Graduates are prepared for leadership across the healthcare spectrum. We encourage students to explore the ways some of our alumni are applying their degrees in local, national, and global settings.

Students who plan to pursue additional graduate studies after earning their MPH — including doctoral programs in medicine, the sciences, or medical research — will develop a set of skills and experiences that strengthen their curricula vitae and distinguish their applications from those of other candidates.

Continuing an Education at Washington University

The College of Arts & Sciences offers undergraduates incredible preparation for careers in health care. By continuing their education at the graduate level, these students will deepen their access to the university's outstanding resources, which include the following:

- Affiliated research centers that offer opportunities for research-based practicum experiences, fellowships, and independent projects
- Research and practicum opportunities at the School of Medicine
- Access to the Bursky School of Public Health, including the Center for Community Health Partnership & Research and the Global Health Center
- Established connections with health and service organizations throughout St. Louis, across the country, and around the world
- Healthcare innovation opportunities at the Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship

Undergraduate Coursework

The 3-2 MPH program is available to students pursuing any major in Washington University's College of Arts & Sciences. We encourage interested students to take courses relevant to preparation for graduate studies in public health. Examples of disciplines related to public health include (but are not limited to) the following:

- African and African American Studies
- Anthropology
- Biology
- Chemistry
- Environmental Studies
- Global Studies
- Political Science
- Psychological & Brain Sciences
- Public Health & Society
- Sociology
- Women, Gender, and Sexuality Studies

PhD in Public Health Sciences

The Public Health Sciences (PHS) PhD program prepares students to think critically as public health scientists, to succeed as independent investigators, and to understand and address public health challenges locally and globally. The program offers unique training opportunities in interdisciplinary research through conceptual and methodological coursework, hands-on research and teaching experiences, active faculty mentoring, and transdisciplinary public health professional acculturation. The PhD program is a four-year, intellectually robust program designed to serve students, faculty, and the school by promoting timely completion, equity, and strong career preparation.

Our doctoral program involves intense training in population and social science research methods and personalized mentoring by some of the leading scholars in the field. We provide a diversity of experience and faculty with a cross-section of interests that enhance transdisciplinary learning. Our faculty are on the forefront of research in health disparities, epidemiology and biostatistics, global health, health policy, urban design and the built environment, violence and injury prevention, and mental health. The curriculum prepares students for research leadership in a rapidly changing society. Our collaborative and entrepreneurial community is committed to conducting research that will have social impact.

Current Doctoral Programs Team

- Professor Patrick J. Fowler, PhD, Program Director
- Assistant Professor Maura Kepper, PhD, Faculty Lead
- Jennifer Ramirez, MEd, Program Manager

For additional information, please refer to the Doctoral Programs Viewbook and the PhD in Public Health Sciences Program Overview on the WashU Public Health website.

Doctoral Education Sub-Committee

The Public Health Sciences PhD program is governed by the Doctoral Education Sub-Committee comprising a chair and faculty members drawn from the Bursky School of Public Health. It is a sub-committee of the Bursky School of Public Health Education Committee. Faculty will be invited annually to serve on this committee by the Program Director and the Dean of Education in the Bursky School of Public Health; PhD students serving as cohort representatives also sit on the committee. Committee members meet bi-monthly at most and at least twice per academic year. Consult the Cabinet, Committees, and Subcommittees page of the WashU Bursky Public Health website for a list of the current members of the Doctoral Education Sub-Committee.

Degree Requirements

PhD students develop an individualized research area through coursework and mentored training opportunities. Students have the option to define their own areas of individual research interest with the Generalist concentration, or they can choose to concentrate in Dissemination & Implementation Sciences (D&I) or Systems Science for Health Equity (SS4HE). Consult this page's Concentrations tab (p. 84) for more information.

Students are offered admissions under faculty mentors with shared research interests and have extensive opportunities to engage in cutting-edge research in child and maternal health, chronic disease epidemiology and prevention, dissemination and implementation science, global health equity, environmental health, health policy, public mental health, systems and data sciences, and other fields.

Curriculum

The program provides a structured yet flexible curriculum that balances core training in theory and methods with professional skill development and practical experience. Our program requires 40 credits earned by taking courses and completing mentored research and teaching experiences.

Students' first year of study includes basic principles in research, statistics and measurement, theoretical study, and content to strengthen their social science knowledge base. The second year offers a more individualized program of study expanded to include electives offered throughout the university. A curriculum plan is developed by each student and a mentoring team and focuses on an area of specialization. Students complete an oral qualifying exam during the summer following two years of coursework, and they then typically spend an additional two years on work related to the dissertation.

Coursework

The PhD curriculum includes the following:

- Three Core courses (9 credits)
- Five Analysis & Research Methods courses (15 credits)
- Four Professional Development courses (4 credits)
- Two Substantive/Theoretical courses (6 credits)
- Two Teaching Practicum courses (2 credits)
- Two Research Practicum courses (4 credits)

Teaching and research practica typically occur after the first semester of the program. Research practica provide opportunities to engage in different aspects of the research process and to increase a student's capacity for completing independent research. Teaching practica ensure students are well-trained in substantive content and pedagogy as they prepare for independent teaching at the graduate level. Additional opportunities for research development are available within specific research fellowship programs, faculty laboratories, and research centers.

Full-Time Student Status

PhD students must be enrolled in a minimum of 9 credit units to be considered full-time. Full-time status impacts visa status and benefits eligibility, including for the stipend, health insurance, dental insurance, and so on. When students have completed their coursework or if their enrollment will drop below 9 credits in a fall or spring semester, the student must enroll in PHDC 9900 Doctoral Research by completing the form found on the SPH Student Resources website. Additional information can be found on the Dissertation Process tab (p. 94).

Please note that doctoral students typically maintain full-time student status over the summer and additional registration is not required for this session. Students may enroll in courses and required practicums over the summer, if desired.

Overview of Courses and Key Program Milestones

Training in the Responsible Conduct of Science

Central to Washington University's mission of fostering excellence in research is a commitment to ensuring that all individuals responsible for the design, conduct, and reporting of a research study involving human subjects receive adequate education in the protection of those human subjects and the security of research data. The CITI training is a web-based human research protections training program created by the Collaborative Institutional Training Initiative and required of all incoming PhD students. Individuals affiliated with Washington University can access the program through the Research Administration System. This takes place during the first semester of doctoral study as part of one of the foundational courses. There will be several opportunities throughout the academic year to attend additional training (beyond the required CITI training) as required by various research projects and fellowships.

Core Seminars Required of All School of Public Health PhD Students

All students are required to take three core foundational courses.

Code	Title	Units
BSDC 8001	Conceptual Foundations of Social Science Research	3
PHDC 8014	Theoretical Orientations in Public Health Sciences	3
PHFN 5000	Epidemiology	3

Professional Development Seminars

Professional development for PhD students is broken down into a series of four 1-credit seminars taken during the first and second years. It is designed to help acquaint students with school and campus resources; to help them get to know school and university faculty; and to continue to develop critical skills for the field of public health, including authorship, designing effective lectures, submitting grant applications, and more.

Code	Title	Units
PHDC 8800	Professional Development Seminar I	1
PHDC 8801	Professional Development Seminar II	1
PHDC 8802	Professional Development Seminar III	1
PHDC 8803	Professional Development Seminar IV	1

Analysis and Research Methods Courses

PhD students are required to take five analysis and research method courses for a total of 15 credits. The sequence of courses depends on the student's experience and research goals. Students choose from graduate-level quantitative, qualitative, or mixed-methods courses focusing on data collection, management, analysis, or interpretation. They also select courses on study design and relevant scientific methods. Typically, analysis and methods courses ultimately inform the student's area of research interest and their dissertation. Some examples of courses that meet this requirement include the following, but this list is not exhaustive:

Code	Title	Units
BSDC 8003	Foundations of Data Analysis	3
BSDC 8004	Foundations of Data Management	3
BSDC 8005	Applied Linear Regression Analysis	3
BSDC 8006	Generalized Linear Models	3
BSDC 8008	Structural Equation Modeling	3
BSDC 8010	Multilevel and Longitudinal Modeling	3
BSDC 8011	Propensity Score Analysis	3
BSDC 8017	Mixed Methods Research: Foundations and Applications	3
BSDC 8023	Introduction to Agent-Based Modeling	3
BSDC 8025	Survival Analysis	3
BSDC 8026	Developing and Evaluating Implementation Strategies in Health and Social Services	3
PHCC 6004	Health Economics	3
PHCC 6005	Quantitative Methods for Health Policy Analysis	3
PHDC 8007	Social Network Analysis	3
PHCL 6001	Mental & Behavioral Health Epidemiology	3
PHCL 6005	Applied Machine Learning Using Health Data	3
PHCL 6007	Using Administrative Data for Health Services Research	3
PHCL 6008	Systematic Review & Meta-Analysis	3
PHCL 6009	Applied Deep Learning Using Health Data	3
PHCL 6010	Systems Thinking in Health	3
PHS 5100	Development, Validation and Application of Risk Prediction Models	3
PHS 5140	Randomized Controlled Trials	3
PHS 5230	Multilevel and Longitudinal Data Analyses for Clinical Research	3
PHTPS 6003	Health & Place: Spatial Thinking & Applied Methods	3
PHTPS 6019	Applied Qualitative & Participatory Methods	3
PSYCH 8068	Hierarchical Linear Models	3



SPGN 6016	Benefit-Cost Analysis	3
SWPM 6074	Community Based System Dynamics	3
SWPM 6076	Foundations of Geographic Information Systems (GIS) for the Applied Social Sciences	3

Substantive or Theoretical Courses

Students take a minimum of two substantive/theoretical courses related to their research areas of interest. Courses can be in the School of Public Health and/or in different disciplines, such as anthropology, economics, medicine, political science, psychology, services research, etc. The courses that fit this section are selected either from the list of PhD Concentration courses or selected in alignment with the identified research focus for the Generalist Concentration. Some examples of courses that meet this requirement include the following (this list is not exhaustive):

Code	Title	Units
BSDC 8005	Applied Linear Regression Analysis	3
BSDC 8018	Designing for Dissemination, Implementation & Sustainability: How to Maximize Impact & Equity	3
BSDC 8023	Introduction to Agent-Based Modeling	3
BSDC 8026	Developing and Evaluating Implementation Strategies in Health and Social Services	3
CLNV 5230	Introduction to Dissemination and Implementation Science	3
CLNV 5420	Designing for Dissemination, Implementation & Sustainability: How to Maximize Impact and Equity	3
PHCC 6002	Global Health	3
PHCC 6003	Policy, Politics & Power in Global Health	3
PHCC 6004	Health Economics	3
PHCC 6006	Health, Politics & Policy	3
PHCC 6007	Fundamentals of Mental Health for Public Health	3
PHCC 6008	Public Mental Health	3
PHDC 8007	Social Network Analysis	3
PHCL 6003	Translating Epidemiology Into Policy	3
PHCL 6010	Systems Thinking in Health	3
PHFN 5002	Environmental Health	3
PHS 5160	Dissemination and Implementation Science	3
PHTPS 6000	Public Health in St. Louis	3
PHTPS 6002	Protection of Women & Children in Humanitarian Response	3
PHTPS 6004	Chronic Disease: Obesity Prevention & Public Health Policy	3

PHTPS 6006	Global Nutrition and the Environment: Foods Systems in a Changing World	3
PHTPS 6007	Interrogating Health, Race & Inequalities	3
PHTPS 6008	Climate Change & Public Health	3
PHTPS 6009	From the inside-Out: Public Health & The Built Environment	3
PHTPS 6011	Gender, Poverty & Global Health	3
PHTPS 6012	Global Reproductive Health	3
SWPM 6011	Global Mental Health	3
SWPM 6044	Social Entrepreneurship	3
SWPM 6046	Social Innovation	3
SWPM 6074	Community Based System Dynamics	3
SWPM 6077	System Dynamics Modeling for Strategic Design	3

Teaching Practicums

PhD students must take a minimum of two 1-credit teaching practicum courses. These are typically taken beginning in the spring semester of the first year, although students may obtain approval to complete a practicum during the first semester. Practicum courses are designed to give students experience with lecture preparation and delivery, grading, and other aspects of course management under the guidance of an experienced faculty member. Students may serve as an assistant for any School of Public Health or Brown School course and are encouraged to select courses that may become part of their own teaching repertoire in the future. Students are also welcome to serve as teaching assistants in graduate courses outside of the School of Public Health or the Brown School and may do this work in undergraduate courses with permission from the program. When registering for these courses, students add themselves to the Program Manager's section. After completion of the required DocuSign documents, the registrar moves the student into a section under the supervising faculty member's name.

Code	Title	Units
PHDC 9003	Practicum in Teaching I	1
PHDC 9004	Practicum in Teaching II	1

Research Practicums

PhD students must take two 2-credit research practicum courses. These are typically taken beginning in the spring semester of the first year, although students may obtain approval to complete a practicum during the first semester. Students work with a faculty member and may or may not be paid according to whether they are working with a funded study or center. Students and the supervising faculty outline a plan for the practicums along with completing an electronic form that is approved by the advisor and the PHS PhD Program Director. When registering for these courses, students add themselves to the Program Manager's section. After completion of the required DocuSign documents, the registrar moves the student into a section under the supervising faculty member's name.

Code	Title	Units
PHDC 9000	Practicum in Research I	2
PHDC 9001	Practicum in Research II	2

Qualifying Exam

All School of Public Health PhD students must take a qualifying exam. This oral exam demonstrates the student's knowledge of the substantive issues, key research questions, theory, empirical evidence, and implications related to their research area of interest. Students are expected to pass their qualifying exam by the end of the summer after their second year. Students who do not pass their exam by the first attempt may have until the end of the fall semester of their third year to retake and pass the exam. Additional information is available on the Qualifying Exam tab (p. 93) of this page.

Dissertation Proposal and Dissertation Defense

After the Qualifying Exam has been successfully completed, the student will be permitted to begin the dissertation process, which includes proposing an empirical approach for addressing an important question identified by the student and then conducting and disseminating the research results. The process aims to demonstrate mastery of a specific field of knowledge and the capacity for original scholarly work. Additional information is available on the Dissertation Process tab (p. 94).

Concentrations

There are currently three concentrations open to PhD students: 1) Generalist, 2) Dissemination and Implementation Sciences, and 3) Systems Science for Health Equity. For more information about each of the concentrations and their requirements, consult the Concentrations tab (p. 84) of this page.

Note: Doctoral students may take master's level courses at the School of Public Health or from another university school or department. However, students may not repeat a course that is equivalent to a course completed as part of their prior graduate degree(s).

Timetable for Program Progress

Students are expected to proceed at a pace appropriate to enable them to finish within the time limits detailed below. Students are expected to have completed all PhD requirements except for the dissertation no later than the end of the first semester of the third year of full-time graduate study. The purpose of these limits is to provide guidelines for satisfactory progress. The following list includes both the target years and the time limits for the completion of program requirements:

- Coursework Completed:
 - Target = End of Year 2
 - Limit = End of Fall Semester, Year 3
- Qualifying Exam Committee Formed:
 - Limit = End of Year 2
- Qualifying Exam Passed:
 - Target = End of Summer after Year 2
 - Limit = End of Fall Semester, Year 3
- Approval of Dissertation Proposal:
 - Target = End of Fall Semester, Year 3
 - Limit = End of Year 4
- Dissertation Defended:
 - Target = End of Year 4
 - Limit = End of Year 7

While all students are encouraged to complete coursework within the first two years, some fellowships may require additional coursework into the third year. Students may take a limited number of courses (one to two) into the third year, if necessary, to meet their educational goals in consultation with their advisors. Students may also take courses in the summer; however, only courses offered through the School of Public Health are eligible for tuition remission during the summer.

The deadlines for passing the Qualifying Exam and for defending the Dissertation are firm. Students are automatically dismissed from the program if they fail to meet the seven-year deadline. Exceptions are rare and made only by approval of the Director of the PhD program and the Doctoral Education Sub-Committee. These exceptions must include a serious extenuating circumstance. *A student may apply only once to the Doctoral Education Sub-Committee to extend this deadline, and applications will be approved only if the student has a realistic plan to finish in a timely manner.* It is unlikely that the Doctoral Education Sub-Committee will extend the dissertation defense deadline without prior completion of the Qualifying Exam and Dissertation Proposal.

Concentrations

PhD Concentrations

School of Public Health PhD students develop an individualized area of interest through coursework and mentored training opportunities that culminate in an empirical dissertation demonstrating mastery of a specific field of public health sciences. All students enter under the Generalist Concentration through which they choose from a wide variety of courses that align with their individual area of interest, with the option to declare one of our more structured concentrations, which provide a framework for interested students to develop competencies in subfields of expertise. Successful concentrators earn a PhD in Public Health Sciences with a specialization in their chosen area. Upon graduation, completion of the concentration is

noted on the student's academic transcript and may be listed on their CV. Currently, the School of Public Health offers the following concentrations: 1) Generalist; 2) Dissemination and Implementation Sciences (D&I); and 3) Systems Science for Health Equity (SS4HE).

Administrative Oversight

Each PhD concentration is overseen by at least one primary instructional faculty (PIF). The PIFs coordinate with the PhD Program Director to ensure students meet all concentration and program requirements. The PIFs also work to ensure that cutting-edge training opportunities in the subfield are accessible to students. This includes developing and monitoring course offerings and facilitating potential mentorship matches between students and faculty. In the case of the Generalist Concentration, the PhD Program Director serves as the PIF, and students build both formal and informal mentoring relationships with faculty members who have similar research interests and areas of expertise.

Process and Timeline

Students complete PhD and concentration coursework during the first two years of the program. They also fulfill all other PhD requirements, including mentored training opportunities. Students are typically supervised by and complete a Qualifying Exam with faculty experts in the subfield. Students work with their faculty advisor, the PIF, and the Program Director to ensure interest alignment and eligibility. Students initially declare a concentration of interest in Workday during their first year, but they do not formally apply for their chosen concentration until after successfully completing their dissertation proposal. Course requirements will be considered as part of the concentration application, and students will be expected to complete concentration coursework, independent study, or other mentored research training opportunities that include or are equivalent to at least nine full hours of academic work per week for 15 weeks for each 3 units of credit.

Generalist PhD Concentration

Rationale and Competencies

The Generalist Concentration allows students to choose to focus on a research interest of their own, selecting coursework and working with faculty members who can support their interests. Students selecting this track will be prepared to meet the following competencies:

- Design and conduct independent research in a specialized focus area within public health and demonstrate mastery of that area.
- Understand and apply a range of study designs, research methods, and approaches to data management and analysis commonly used in public health and in the specialized focus area.
- Evaluate scientific literature in public health and the specialized focus area critically but fairly and identify gaps that need to be addressed.

Generalist Concentration Requirements

Coursework

Students complete coursework and mentored training aligned with their specialized focus area. Coursework should be selected to expose students to the emerging conceptual, methodological, and ethical issues around their focus area. Students select a minimum of 9 credits of courses from graduate offerings. Students also complete course requirements for the PhD degree, which provide ample opportunities to supplement the Generalist Concentration coursework with highly relevant methods courses in mixed methods, multilevel modeling, system sciences, and so on.

Mentored Research

Concentrators identify faculty mentors whose scholarship aligns with their specialized area of focus. Together, the student and their faculty mentor(s) develop and execute research that culminates in a dissertation that contributes to the literature on the focus area.

Primary Instructional Faculty

The PhD Director, Patrick Fowler (pjfowler@wustl.edu), is the initial point of contact for generalist concentrators. Students build a network of additional faculty mentors through activities such as coursework, research and teaching practicum opportunities, and attending talks and seminars to build out their support system and committees.

Courses

Note: The following list of courses is meant to provide examples of the work undertaken by students in this concentration; it is not an exhaustive list.

Code	Title	Units
BSDC 8003	Foundations of Data Analysis	3
BSDC 8004	Foundations of Data Management	3
BSDC 8005	Applied Linear Regression Analysis	3
BSDC 8006	Generalized Linear Models	3
BSDC 8008	Structural Equation Modeling	3
BSDC 8010	Multilevel and Longitudinal Modeling	3
BSDC 8011	Propensity Score Analysis	3
BSDC 8018	Designing for Dissemination, Implementation & Sustainability: How to Maximize Impact & Equity	3
BSDC 8023	Introduction to Agent-Based Modeling	3
BSDC 8024	Introduction to Dissemination & Implementation Science	3
BSDC 8025	Survival Analysis	3

BSDC 8026	Developing and Evaluating Implementation Strategies in Health and Social Services	3
CLNV 5230	Introduction to Dissemination and Implementation Science	3
CLNV 5240	Implementation Science: Measures, Metric and Methods	3
CLNV 5420	Designing for Dissemination, Implementation & Sustainability: How to Maximize Impact and Equity	3
PHEL 6003	Translating Epidemiology Into Policy	3
PHEL 6005	Applied Machine Learning Using Health Data	3
PHEL 6009	Applied Deep Learning Using Health Data	3
PHEL 6010	Systems Thinking in Health	3
PHS 5160	Dissemination and Implementation Science	3
SWPM 6074	Community Based System Dynamics	3
SWPM 6077	System Dynamics Modeling for Strategic Design	3

Dissemination and Implementation Sciences PhD Concentration

Rationale and Competencies

Much of the health burden is preventable, yet there remains a large gap between the evidence known to promote health and application in community and clinical settings. Over nearly two decades, dissemination and implementation (D&I) research has emerged to shorten the translation gap. The D&I PhD concentration is uniquely positioned to build capacity in D&I research. It builds on extensive experience in the following areas: 1) training researchers in D&I methods; 2) conducting D&I research studies; and 3) building strategic partnerships with other researchers and partners to further D&I science. It aims to prepare next-generation public health scholars for the following D&I competencies:

- Describe the objectives of D&I research for promoting health and addressing health equity.
- Critically evaluate D&I theories, models, and frameworks.
- Assess the need for and process of adapting and tailoring interventions and D&I research strategies.
- Design studies that incorporate innovative and emerging methods and measures in D&I research.
- Describe the importance of and methods for incorporating the perspectives of different partners (e.g., patients/families, practitioners, policy makers) in D&I.

D&I Concentration Requirements

Coursework

Students complete coursework and mentored training opportunities in D&I. Coursework aims to expose students to the emerging conceptual, methodological, and ethical issues in D&I research. All students take a 3-credit introductory course in D&I and select two courses (6 credits) from a list of pre-approved offerings. Students who have already completed graduate-level introductory courses in D&I take three domain-related courses. Concentrators also complete course requirements for the PhD degree, which provide ample opportunities to supplement the D&I Concentration coursework with highly relevant methods courses in mixed methods, multilevel modeling, system sciences, and so on. Students also may complete one course through an individually designed independent study with faculty experts in D&I.

Mentored Research

Concentrators identify faculty mentors whose scholarship involves D&I sciences. Typically, these faculty members will supervise the completion of the Qualifying Exam. After finishing D&I and other required doctoral coursework and milestones, students conduct dissertation research in the field under the mentorship of faculty working in the area. Students are encouraged to participate in the various D&I training opportunities offered through the School of Public Health and the university, such as those found on the Dissemination and Implementation Research website. In addition, the Institute of Clinical and Translational Sciences' D&I Research Core affords students opportunities to receive and offer consultation and research support as research assistants.

Primary Instructional Faculty

A team of faculty across Schools coordinate to support D&I concentrators. Feel free to reach out with questions and suggestions. Faculty include the following:

- Maura Kepper (kepper@wustl.edu)
- Byron Powell (bjpowell@wustl.edu)
- Elvin Geng (elvin.geng@wustl.edu)
- Patrick Fowler (pjfowler@wustl.edu)

Courses

Concentrators must take one 3-credit introductory course:

Code	Title	Units
CLNV 5230	Introduction to Dissemination and Implementation Science	3
or PHS 5160	Dissemination and Implementation Science	

Concentrators then choose a minimum of 6 credits from the following courses:

Code	Title	Units
BSDC 8018	Designing for Dissemination, Implementation & Sustainability: How to Maximize Impact & Equity	3
BSDC 8026	Developing and Evaluating Implementation Strategies in Health and Social Services	3
CLNV 5420	Designing for Dissemination, Implementation & Sustainability: How to Maximize Impact and Equity	3
PHL 6003	Translating Epidemiology Into Policy	3

Systems Science for Health Equity PhD Concentration

Rationale and Competencies

Systems science is the study of complex systems. The theories and methods of systems science are applied in almost every discipline, including genetics, biology, engineering, sociology, political science, public health, and more. In the past few years, systems science and analysis have developed rapidly as an interdisciplinary approach to exploring and solving important scientific problems. The Systems Science for Health Equity (SS4HE) PhD Concentration is uniquely positioned to build capacity in systems science through a public health lens. It builds on Washington University's extensive experience in training researchers in systems thinking and methods, conducting systems science research, and building strategic partnerships with other researchers and partners to further systems science. It offers a unique opportunity for doctoral students to engage in and embed transdisciplinary work in complex systems thinking and methods within their Public Health Sciences PhD program, and it aims to prepare next-generation public health scholars for the following systems science competencies:

- Understand how organizational, community, and healthcare systems contribute to public health as complex systems.
- Apply core systems science principles — such as complexity, feedback, emergence dynamics, evolution, endogeneity, social structures, and interactivity — to public health research and intervention design.
- Describe how systems thinking and systems science methods contribute to core research activities of description, prediction, explanation, and causal inference.
- Design studies incorporating systems science tools, such as agent-based modeling, system dynamics modeling, network analysis, group model building, and so on.
- Engage diverse partners in systems science research to ensure equitable public health processes and outcomes.

SS4HE Concentration Requirements

Coursework

Students complete concentration coursework with other PhD requirements during their first two years of the program. Concentrators complete one introductory course in systems science and select at least two additional SS4HE doctoral courses from the options presented below. Students who have already completed introductory courses prior to joining the doctoral program may take another of the SS4HE courses listed below. Students may also complete one course through an individually designed independent study with faculty experts in systems science.

Mentored Research

Students identify faculty mentors whose scholarship involves systems science. Typically, these faculty members will supervise the completion of the qualifying exam. After finishing the required doctoral coursework and milestones, students conduct dissertation research in systems science under the mentorship of faculty working in the area. Students are also encouraged to take advantage of training opportunities across the university, such as the quarterly meetings of the Systems Science Interest Group; the annual Systems Sciences for Social Impact Summer Training Institute; and mentored research opportunities through relevant WashU centers such as the Center for Public Health Systems Science, the Center on Social Dynamics and Policy, the Social System Design Lab, the Center for Mental Health Services Research, and the Center for Advancing Health Services, Policy, and Economic Research.

Primary Instructional Faculty

A team of faculty coordinate to support SS4HE concentrators. Feel free to reach out with questions and suggestions. Faculty include the following:

- Ellis Ballard (eballard@wustl.edu)
- Patrick Fowler (pjfowler@wustl.edu)
- Ross Hammond (rhammond@wustl.edu)
- Douglas Luke (dluke@wustl.edu)

Courses

Concentrators must take one 3-credit introductory course, unless they have already completed an introductory course during a prior graduate degree:

Code	Title	Units
PHL 6010	Systems Thinking in Health	3

Concentrators then choose a minimum of 6 credits from the following courses:

Code	Title	Units
BSDC 8023	Introduction to Agent-Based Modeling	3
PHDC 8007	Social Network Analysis	3
SWPM 6074	Community Based System Dynamics	3
SWPM 6077	System Dynamics Modeling for Strategic Design	3

Mentored Experience Implementation Plan

As part of their degree requirements, PhD students must complete a program-defined Mentored Experience Requirement (MER) as per these guidelines. The Mentored Experience Implementation Plan (MEIP) is the written articulation of a program-defined degree requirement for PhD students to engage in mentored teaching activities and/or mentored professional activities, collectively referred to as the *MER*.

Mentored Experience Requirement (MER)

Philosophy of Teaching

The Public Health Sciences PhD program provides students with practical mentored research and teaching experiences. Students develop methodological and analytical skills in courses that provide discipline-specific historical context, theoretical and conceptual underpinnings, and philosophy. The programs also foster professional acculturation, soft-skill development, and network building.

Preparatory Engagement

Preparatory Engagement activities are those that represent an introduction to the foundational skills associated with teaching or communication. Pedagogical preparation engagement activities are normally completed before students are permitted to engage in assisting or teaching in a classroom.

PhD students fulfill the Preparatory Engagement through a sequence of teaching activities. Students in their first year achieve basic instructional competencies through the following experiences:

1. New student orientation
2. Professional Development Course: PHDC 8800 Professional Development Seminar I (fall, first year)
3. Professional Development Course: PHDC 8801 Professional Development Seminar II (spring, first year; can be concurrent with the first AI engagement)

Students are also introduced to the WashU Center for Teaching and Learning, where they can engage in optional skill workshops.

Mentored Teaching Experiences (MTEs)

Assistant in Instruction (AI)

An Assistant in Instruction (AI) is a PhD student who is directly engaged in the organization, instruction, and/or support of a semester-long course *primarily taught by a faculty member*. An AI receives mentorship from a faculty member related to best practices in classroom engagement, instruction in the field, interpersonal engagement, and other relevant skills. Students and mentors complete a mentorship plan prior to the start of each AI experience. To complete each AI assignment and to ensure that it applies toward their degree requirements, students must register for the appropriate course number for each semester of engagement. Refer to the "Required Pathways for Completion" section below for course numbers and details.

Students complete two required AIs via teaching practicum courses (PHDC 9003 Practicum in Teaching I and PHDC 9004 Practicum in Teaching II, with an optional PHDC 9005 Practicum in Teaching III) under the guidance of experienced faculty, starting in the spring of the first year.

AI/Teaching practicum (TP) experiences may vary in regard to tasks; however, the minimum is 1 credit unit for each, and students should expect to spend about 10 hours per week throughout the semester for each TP. Students with at least a B average and no incompletes may register for a required teaching practicum starting in the spring of the first year. Students can choose their two required practicums (in consultation with their advisor) among any of the classes taught by full-time, adjunct, or visiting faculty members. With permission from the Program Director, TPs may also be completed elsewhere in Washington University, outside of the School of Public Health or the Brown School. In rare cases, the TP can be met by independently teaching a course at Washington University or elsewhere with approval.

Adequate knowledge of the subject matter is a prerequisite for a TP experience to earn practicum credit. This requirement can be met by the student having completed the course they wish to choose, or by the faculty supervisor for the teaching practicum certifying that the student has adequate knowledge of the subject matter.

AI/Teaching practicums require that the student be involved in a variety of teaching tasks. The minimum involvement includes the following:

- Giving at least one full lecture based on notes developed by the student and approved in advance by the professor
- Providing course-relevant consultation for students who are having problems learning the material
- Grading or critiquing student assignments

Students may complete more than one TP in a semester if the advisor deems it appropriate relative to the other courses taken. It is highly recommended that the student meets their TP requirements by assisting different classes or with different faculty mentors. This wider exposure ensures more preparation for a teaching career. Class enrollment must be a minimum of five students (even if the class is not cancelled) to be approved for TP credit. Even for classes meeting the minimum of five students, the final decision to approve the practicum is made by the PhD Program Director as, in some cases, the student may require a larger and/or more comprehensive teaching experience.

Required Pathways for Completion

Students work with their faculty mentor and their Director of Graduate Studies to plan how and when they will complete their MER. Students register during the normal registration period for courses in accordance with one of these approved pathways.

Students complete two required AIs via teaching practicum courses under the guidance of an experienced faculty, starting in the spring of the first year.

BSDC 9003	Take one time
BSDC 9004	Take one time
BSDC 9005	Take one time

In order to enroll in a teaching experience, students must first add themselves to the waitlist in Workday under their Program Manager's section and then complete the Mentored Teaching Experience Form, which is found on the SPH Student Resources website. This form requires the following information: teaching practicum instructor, faculty advisor, and course information (meeting schedule with instructor, student responsibilities, lecture topics, office hours, course development plan, and so on). Faculty members who serve as teaching practicum instructors advise students in developing practicum proposals, and they assume responsibility for evaluating student efforts by providing a grade for their performance at the end of the semester. Once this form is completed, the registrar's office will move students into the correct course section under their faculty instructor so that the instructor is able to assign a grade. This form is also used to track the student's progress in the program.

The process of earning required teaching practicum credits works as follows:

1. Teaching practicums require that the student be involved in a variety of teaching tasks. *The minimum involvement includes the following:* 1) giving at least one full lecture based on notes developed by the student and approved in advance by the professor; 2) providing course-relevant consultations for students who are having problems learning the material; and 3) grading or critiquing student assignments.
2. Courses with a teaching practicum student must provide student evaluations of the TP student's work; these are to be separate from those completed for the instructor.

3. Faculty who agree to work with students in meeting their teaching practicum requirements must hold supervisory meetings during the course of the semester and, at the end of the semester, provide a short statement to the student that summarizes the student's major strengths and primary weaknesses as a teacher. *Doctoral students cannot serve as instructors for other doctoral students' teaching practicums.*
4. In addition to enrolling in the appropriate course under the Program Manager's section, the student must also submit the Mentored Teaching Experience Form to enroll in the TP. (Consult instructions above.)
5. The course instructor evaluates the student's performance and submits a letter grade at the end of the practicum. Students should make sure they get their grade for the practicum. If the e-grade deadline is missed, students should contact the Program Manager. Evaluation is based upon the student's performance in executing the tasks set forth in the TP form. The evaluations assess the student's attainment of knowledge as it relates to teaching.

Optional Activity: Teaching Intensive Pathway (TIP)

The TIP is an optional pathway for those students whose career interests lie in academia or another field that would benefit from extended teaching experiences. This immersive experience allows students to further explore the breadth and depth of teaching best practices and pedagogy related to their respective field. Students who are interested in participating in this elective experience must formally request to participate, which is subject to program approval. Due to this experience being an elective, unpaid experience, students who participate in the TIP will not receive compensation.

Students have two options to complete the TIP:

1. One Mentored Independent Teaching Experience (MITE)
After completing all three required teaching practicums, eligible doctoral students may enroll in PHDC 9501 Mentored Independent Teaching Experience (MITE) with approval. The unpaid MITE fulfills the requirements of the TIP and allows full-time students to teach their own masters-level course under the guidance of an experienced faculty member. The student leads all aspects of the course development and implementation, including developing and finalizing the syllabus, preparing all lectures and class activities, planning and conducting student assessments, and effectively managing student communications. Faculty mentors support students by offering course materials, advising on course design and implementation, and providing consultation on classroom issues that arise during the semester. Typically, faculty mentors include the Associate Dean for Education, the Doctoral Program Director, or an appropriate full-time School of Public Health faculty member (e.g., course lead). (Additional information can be found below.)
2. Two Mentored Assistant Teaching Experiences (MATES)

After completing the required AI/Practicum teaching experiences, students may seek additional experience assisting in the teaching of core courses. The unpaid PHDC 9500 Mentored Assistant Teaching Experience (MATE) exists to meet school needs, not just the learning needs of the students. Students have the option to complete two MATEs to meet the requirements of the optional TIP. (Additional information can be found below.)

Optional Pathway #1

BSDC 9501	Take one time
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Students interested in completing a MITE must meet similar eligibility requirements as exist for teaching practicums. Students must have at least a B average without any incompletes. They must have also completed the two required teaching practicums and have adequate knowledge of the subject matter to teach the course. At least five students must enroll in the course. If a student is in their fourth year and the Qualifying Exam requirement *has not been completed*, the student will not be permitted to teach independently. Students may do only one MITE per semester, and they cannot enroll in a MITE and a Mentored Research Experience in the same semester.

The process for enrolling in a MITE works as follows:

1. Students should discuss the opportunity with their advisor to consider the goals and expectations of independent teaching, how the MITE fits with the student's career goals, progress toward program milestones, and managing ongoing non-teaching responsibilities. They also should discuss potential courses to teach and the timing of the MITE. Faculty advisors must approve a student's MITE.
2. Interested students should communicate with the Program Director and the Associate Dean of Education, who can provide additional information about teaching needs and potential course options. Course availability depends on several factors, and, ultimately, the MITE options will be driven by the teaching needs of the school. The Associate Dean will finalize student matching to courses.
3. Once finalized, the student should enroll in PHDC 9501 Mentored Independent Teaching Experience under the Program Manager's section and complete the Mentored Teaching Experience Form. The form is approved by the supervising instructor, the faculty advisor, and the Program Director. After approval by the Program Director, the Registrar enrolls the student into a specific section of MITE under the appropriate faculty member.
4. The supervising faculty member submits a grade in Workday at the end of the MITE. Students should make sure they get their grade for the practicum. If the grading deadline is missed, the student should contact their Program Manager.

Optional Pathway #2

BSDC 9500	Take two times
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Students are appointed by the School of Public Health Associate Dean of Education. They report directly to the Associate Dean, who may not appoint a student who fails to make adequate progress toward the completion of the PhD. Several factors determine the need for a MATE. These include a request from the instructor, the MPH Program Director (for MPH courses), or the PhD Program Director (for PhD courses). The need for a MATE is also based on student demand, class size, lab sections, and instructor release time. The Associate Dean coordinates advertisement and recruitment for the MATE. Full-time students may enroll in no more than one MATE per semester.

The educational needs of the student remain as important considerations for permission to engage in optional teaching. Eligibility, minimum involvement, and registration processes are the same as those required for the TP. *Students who have not accomplished program milestones in a timely manner may not be allowed to do teaching practicums or at least be restricted in regard to numbers in a given semester or over the summer.* If a student is in their fourth year and the Qualifying Exam requirement *has not been met*, the student will not be permitted to enroll in a MATE. In rare cases, if the student is making exceptional progress and completes the teaching requirements ahead of schedule, students may be permitted to teach upon request for approval by the Chair and the Program Director. The student's advisor and the Program Director determine throughout the process if milestones are being reached prior to approving the non-credit teaching experience. Students enroll in MATE using the Mentored Teaching Experience Form. The faculty instructor assigns a grade (Pass/No Pass) at the end of the semester. Students should make sure they get their grade for the practicum. If the grading deadline is missed, students should contact their Program Manager.

Research Experience

Mentored Research Experience

Overview

The mentored research experience provides opportunities for students to engage in different aspects of the research process with faculty mentors. Learning objectives include the conceptualization of research questions; the review, assessment, and synthesis of relevant literature; the operationalization of theoretical concepts and empirical questions; data collection; the analysis of data; and the interpretation and dissemination of findings.

In order to enroll in a research experience, students must first enroll in the appropriate course under their Program Manager's section and then complete the appropriate form. The forms require the following information: faculty instructor, faculty advisor, and research proposal (varies depending on the specific research experience). This form is

also used to track the student's progress in the program. Once this form is completed, the registrar's office will move the student into the correct section with their faculty instructor so the instructor is able to assign a grade at the end of the semester.

Research Practicum

Students complete two required research practicum (RP) courses beginning in the spring semester of the first year; if desired, these may be completed during the summer:

Code	Title	Units
PHDC 9000	Practicum in Research I	2
PHDC 9001	Practicum in Research II	2

Two options exist for students to meet practicum requirements: 1) working on a faculty research project; or 2) conducting an independent research project under the guidance of a faculty advisor serving as the practicum instructor. The most important consideration during the student's RP should be developing the capacity for doing independent research. Students should have the opportunity to delineate and focus on a specific aspect of a larger project, which may become their major responsibility. RPs also allow students and faculty to develop a working relationship and potentially to connect in an advisor-advisee relationship.

Students who choose to conduct an independent research project for their RP are expected to collaborate closely with the practicum instructor on the design and implementation of a small-scale research project. In doing the project, the student should maintain close communication with the faculty member who has agreed to serve as their practicum instructor. The practicum instructor is responsible for ensuring that the student has developed appropriate and feasible learning objectives and for evaluating student progress toward those objectives. Regardless of project type, students are encouraged to write publishable articles reporting the results of their research.

Students are expected to spend approximately 225 hours per semester (an average of 15 hours per week) in RP-related activities. *PhD students earn 2 credits for each course, for a total of 4 credits.*

The process for enrolling in an RP is as follows:

1. Students actively engage with faculty during their first and second semesters and develop an RP proposal. The written statement, prepared in collaboration with the RP instructor, describes the research activities and states the learning objectives. The proposal must indicate the tasks for each of the semesters of practicum work on the project. It is essential that the proposal indicate how the practicum will contribute to the student's capacity to perform independent research. While students may receive pay for these experiences, it is critical that there be specific academic products obtained or skills learned related to student objectives, not just meeting the task requirements of a funded research project.
2. The student enrolls in the appropriate course number for Practicum in Research I or II under the Program Manager's section.

3. The student uploads the written proposal as part of the Mentored Research Experience Form found on the SPH Student Resources page. The form requests approval from the practicum instructor, the faculty advisor, and the Program Director. After approval by the Program Director, the registrar enrolls students into a specific RP section under the practicum instructor's name. *All forms must be completely approved before the course add/drop day for the semester.*
4. The practicum instructor evaluates the student's practicum performance. Evaluation is based upon the student's performance in executing the tasks set forth in the written practicum proposal. The evaluations assess the student's attainment of knowledge as it relates to the research and the student's ability to prepare for scholarly research. The practicum instructor submits a grade at the end of the practicum. Students should make sure they get their grade for the practicum. If the grading deadline is missed, students should contact their Program Manager.

First-year doctoral students may not enroll in an RP during their first semester without approval from the Program Director. If the student has completed all courses with at least a B average and no Incompletes, they may sign up for an RP for the subsequent semester. Students and the supervising faculty outline a plan for the RPs along with completing the electronic form that is approved by the advisor and PhD Program Director. Practicum instructors typically are full-time Washington University faculty who have demonstrated competence in the social sciences or in research relevant to the field of public health. Final approval for a particular RP rests with the student, the faculty advisor, and the Program Director. Practicum instructors who are located outside of Washington University complete the same electronic RP form and follow the same guidelines as Washington University members. The instructor mentoring RPs for credit cannot be a student and must have grading privileges at Washington University to serve in this capacity.

Students are encouraged to explore a variety of practicum placements prior to making a final decision. Initial plans for RPs should involve discussions with the faculty advisor. The student should explore specific possibilities for a given practicum with the practicum instructor. These discussions eventually lead to a written practicum proposal that must be agreed to by the student, the practicum instructor, and the faculty advisor.

Expectations of educational experiences in RPs align with the phases in applied social research. The below list serves as a general guide for discussing RP opportunities during the various research phases. The list covers more than any particular student is likely to achieve across RPs. Instead, the purpose is to help inform doctoral students so they can look carefully at RP opportunities, consider areas of learning with faculty members, negotiate for areas that are of particular interest and importance, and, in general, make more informed choices and agreements regarding the RP.

Topics for RP Discussions

Developing Questions

- Mastery of substantive knowledge
- Identification of key research questions
- Selection and use of theory
- Specification of propositions and hypotheses

Research Design, Proposal Writing, and Seeking Funding

- Designing a research project
- Developing a research proposal
- Submitting a proposal to a potential funder

Population and Sampling

- Identification of the population of interest
- Mastering sampling issues

Measurement and Instruments

- Identifying and/or creating valid and reliable measures
- Constructing questionnaires and other research instruments
- Piloting and ensuring the language equivalence of instruments and measures

Collecting Data

- Making field arrangements for data collection
- Conducting interviews and other forms of data collection
- Managing data collection for a large project

Preparation and Management of Data

- Entering and "cleaning" data
- Making arrangements for use of an existing dataset
- Management and manipulation of a dataset
- Merging two or more datasets

Data Analysis

- Using advanced quantitative techniques
- Using advanced qualitative techniques

Reporting

- Writing research reports in various forms: reports, poster presentations, working papers, peer-reviewed articles
- Attending and presenting at professional and academic meetings
- Submitting articles to professional and academic journals

Ethics and Human Subject Research

- Developing and modifying Institutional Review Board protocols
- Learning how to conduct informed consent
- Executing Institutional Review Board protocols and trainings
- Developing annual continuation reports
- Learning how to work with Data and Safety Monitoring Boards
- Conducting community-engaged research
- Working on community advisory boards
- Identifying and partnering with community members

Discussions With Potential Practicum Mentors

- Invite the student to share any research products they would like to work on during their assistantship. If the student does not have specific projects, offer a few options that fit with the skills they are hoping to develop. (**Note:** If the RP product is a student's own project, the execution of the following steps should be catered to the circumstance.)
- Invite the student to share what research skills they are hoping to develop during the assistantship.
- Explore the student's learning style.
- Share your approach to research supervision; explain the best way(s) to communicate with you.
- Discuss and agree upon a realistic, deliverable RP product.
- Discuss the authorship of any product(s) in accordance with the WashU authorship standards
- Brainstorm product tasks, set deadlines, and discuss grading criteria.
- Schedule recurring meetings.
- Write down and sign RP details.
- Prior to the meeting:
 - Jointly set the agenda.
 - Clarify if/what portions of the product should be submitted for feedback.
 - Specify the desired format of the product for feedback.
- During the meeting:
 - Provide constructive feedback.
 - View meetings as opportunities to teach skills.
 - Forecast the next step and check with the student about their degree of confidence in executing the next step.
 - Provide instruction to develop any skills needed to accomplish the next task, as needed.

- Provide overall feedback to the student regarding their grade for the RP (e.g., mid-term grade reports) so that the student has time to improve/correct their work and so they will not be surprised by their final grade.
- Submit the RP grade in a timely manner (by the faculty instructor).
- Miscellaneous qualities that have been endorsed as helpful:
 - View the RP student as a junior colleague.
 - Allow students to pursue their own relevant projects/papers with your input (i.e., a paper idea that may or may not fit with a current project but that does fit with your expertise).
 - Assign research tasks that are appropriate for PhD-level skill development. (These vary depending on the student's previous research experience.)
 - Avoid micromanagement.
 - Strive for a positive working relationship.
 - Check-in with the RP student periodically about how the practicum is going. (Is the practicum meeting their expectations? Is research supervision conducive to their learning?)

Doctoral Research

Doctoral students enroll in PHDC 9900 Doctoral Research after completing the required RP credits and coursework. Typically, this occurs during year three and beyond, but it should be used in any semester when the student will be enrolled in fewer than 9 credit units. Enrollment in PHDC 9900 Doctoral Research maintains full-time status for the student. This 0-credit course allows students to continue research with advisors or to engage in new research with other faculty mentors to build skills and working relationships. Students are expected to engage in mentored research experience with faculty through the entirety of their doctoral studies.

Similar to the RP, PHDC 9900 Doctoral Research allows students to delineate and focus on a specific aspect of a larger project that builds skills and provides opportunities for academic products. Students either partner on a faculty research project or conduct independent research under the guidance of a faculty advisor serving as the instructor. To enroll in this course, students must complete the Doctoral Continuing Student Status Form, which will trigger the registrar to enroll the student in the correct section. This form requires a brief written proposal (one to three paragraphs) that summarizes student expectations and requirements.

The faculty instructor assigns a Pass/No Pass grade at the end of the semester. Students should make sure they get their grade for the practicum. If the grading deadline is missed, the student should contact the Program Manager.

Note: *In order to maintain full-time status and not experience a lapse in health insurance coverage, students in year three and beyond who will be continuing enrollment in the fall semester should have their faculty advisor sign the Doctoral Continuing Student Status Form by July 31 ahead of each fall semester. Failure to complete this task by the deadline can lead to a gap in health insurance coverage and a delay*

in the ability to enroll dependents. In addition, failure to be enrolled ahead of the add/drop date for the fall or spring semester can result in an inability to enroll/continue in the program for a minimum of one semester and a loss of student status and visa eligibility.

Full-time students are expected to spend 20 hours per week, on average, on research with faculty. **Note:** Students who have completed research and course requirements must enroll in PHDC 9900 Doctoral Research each semester until graduation.

Paid Research Experiences

Full-time students receiving stipends may engage in no more than 10 hours per week of paid research outside of PHDC 9900 Doctoral Research during the fall and spring academic semesters. Students may work up to 20 hours per week in paid research and/or teaching during the summer or after year five in their program. Paid research experiences are coordinated outside of the programs directly with employers. It is up to the student to ensure the work accords with university and employment policies. **Note:** Failing to comply with these policies jeopardizes full-time student status.

Qualifying Exam

Qualifying Exam Overview

The Qualifying Exam extends, elaborates, and formalizes the student's preliminary formulation of interests. It assesses the student's in-depth ability to synthesize the existing literature and apply professional, theoretical, and research competencies to their specific area of interest. It also serves as an indication of the student's emphasis and readiness for more independent scholarly activities, including the proposal and dissertation.

To help plan an individualized program of study, the following are recommended:

- Students should start shaping their area of research interest starting with their first-year coursework and practicum experiences. The initial outline will help guide future course planning and subsequent theoretical and methodological learning experiences in the program. Of course, it is natural for the area of focus to shift, and it should be reviewed and updated as necessary to accurately represent the student's evolving preferences and intellectual growth.
- By the fourth semester (or earlier), students work with their faculty advisor to assemble a three-member Qualifying Exam Committee. To finalize this committee, the student should submit the Qualifying Exam Committee Approval Form.

- Students work with their Committee to define the scope of the Qualifying Exam and select 25 to 50 papers that cover the theoretical foundations, methods, and key debates in the field. Students are expected to read these works in depth and to understand both their significance and methodological approaches.
- From this larger set, the student and committee identify three to five core papers for detailed discussion.
- The student then creates and delivers a 45-minute, conference-style presentation that synthesizes the literature, highlights the core papers, critiques methods and findings, and outlines implications for their emerging dissertation direction. Following the presentation, the committee engages the student in a question-and-answer session, probing both their depth and breadth of understanding. The entire exam is scheduled for two hours during the summer after the second year.
- The Committee then deliberates on the outcome of the exam. Outcomes include Pass, Conditional Pass, and Fail. Students who fail the exam are allowed one retake before the end of the fall semester of their third year. The exam is designed not only to assess readiness for candidacy but also to provide a direct springboard to the dissertation proposal, ensuring students move more efficiently into independent research.

Qualifying Exam Committee

The Chair of the Qualifying Exam Committee is *required* to be a full-time Washington University faculty member authorized by the program to mentor PhD students. The Committee includes two additional full-time Washington University faculty members with doctorates who are authorized to supervise PhD students. Most Primary and Secondary SPH faculty are eligible. Research Faculty and/or Professors of Practice with doctorates may serve as members of the Area Statement Committee, but Teaching Faculty may not. Students work with the Chair to identify the most appropriate faculty members who meet the above criteria and provide expertise in the student's core area of specialization. Typically, the additional members continue to serve as members of the Dissertation Committee. The committee composition will be reviewed by the Program Director as part of the Qualifying Exam Committee Approval Form.

Qualifying Exam Deadlines

PhD students must meet the following deadlines around the Qualifying Exam:

- Assemble a three-person Qualifying Exam Committee and submit the approval form by the end of the fourth semester.
- Successfully pass the Qualifying Exam by the end of the summer after year two. If the student takes the exam during the summer but does not successfully pass, the student is granted a single retake. This retake must be completed by the end of the fifth semester.
- A student who fails to pass their Qualifying Exam after the second attempt must withdraw from the program.

Qualifying Exam Privileges

Third-year students are *not* permitted to do Mentored Teaching Experiences or to engage in paid part-time research assistantships until the Qualifying Exam requirements have been met.

- Students in year three may not teach or TA in the fall semester unless they have passed the Qualifying Exam by August 1 before the fall semester.
- Similarly, students in year three may not teach or TA in the spring semester unless they have passed the Area Statement and Qualifying Exam by December 15 before the spring semester.

A petition for an exemption for teaching or part-time research privileges can be made by the Qualifying Exam Chair. The Chair submits to the Program Director a rationale for an extension, a plan to support timely work, and a reasonable timeline for completion. *Extensions made by the Program Director are based on the progress that the student has made, the quality of their previous work, and their committee's recommendation.*

Dissertation Process

School of Public Health doctoral students must complete a dissertation to demonstrate the mastery of a specific field of knowledge and the capacity for original scholarly work. Students must complete a series of steps and milestones in order leading toward the completion of their degree.

- Finish all coursework and practicum requirements in years one and two.
- Work with their faculty advisor to create their three-person Qualifying Exam Committee by the end of year two, and submit their Qualifying Exam Committee Approval Form.
- Take their Qualifying Exam by the end of the summer after year two. Students who do not pass the first exam may retake it once before the end of the fall semester of year three.
- Add additional members to their committee, including one external member, and begin the dissertation proposal.
- Finalize and submit their Dissertation Committee Approval Form.
- Finish their proposal and have it approved by their committee.
- Submit the Notice of Title, Scope, & Procedure of Dissertation Form at least 6 months before they schedule their dissertation defense. At this point, students are officially PhD candidates.

- Submit the Application for Program Completion in Workday.
- Submit the Dissertation Defense Notification Form at least two weeks prior to the defense date. Email the Program Manager to discuss any logistics related to the defense, and to provide the Program Manager with an updated copy of their CV.
- Defend their dissertation, ideally by the end of year four. WashU students have a maximum of 7 years (14 semesters) to complete a PhD.

The steps in the dissertation process are detailed below, along with other considerations and special situations.

Step 1: Form the Dissertation Committee

Students form a Dissertation Committee (authorized by the program) that meets the Doctoral Education Sub-Committee oversight requirements. The Dissertation Committee, which approves the subject and approach of the dissertation, consists of at least four full-time Washington University faculty members authorized to supervise PhD students in the PHS PhD program and who have appropriate expertise in the proposed field of study. One of the faculty members must be the student's faculty advisor who chairs the Dissertation Committee. One of the four may be a member of the emeritus faculty. The Dissertation Defense Committee must include a fifth committee member external to the student's doctoral program of study. The external member could be inside or outside of Washington University but must have a doctoral degree and an active research program at another university, in government, or in industry. Additional faculty member(s) may be added for cases in which additional expertise is required.

Faculty service on a Dissertation Defense Committee is approved by the Program Director. As soon as the membership of the committee is determined, the student submits the Dissertation Committee Approval Form. Committee members agree to serve, and the external member provides their CV to demonstrate their active research agenda. The Program Director reviews and approves the committees. Approval of the Dissertation Committee may take place any time after the completion of the Qualifying Exam but no later than the completion of the Dissertation Proposal.

Any changes made to the Dissertation Committee (including adding or replacing members) after the approval will necessitate the submission of a new Dissertation Committee Approval Form. (Consult the Faculty Departures section below.)

Step 2: Choice of Dissertation Model

At the School of Public Health, doctoral students are allowed to develop and submit dissertations in one of two approved models. The student may pursue either model, with the approval of the Chair and Program Director.

Traditional Model

The traditional model is a thesis-style dissertation that is composed of multiple chapters that describe a coherent dissertation research project. Typically, the traditional model will have *at least five chapters*:

1. An introduction;
2. A theoretical and conceptual overview of the problem area;
3. A chapter that presents the methods;
4. One or more chapters that present the results; and
5. A conclusion that summarizes the research, interprets the findings, discusses limitations, and presents the implications for the field.

The actual structure of the dissertation will correspond to the particular characteristics and goals of the dissertation project.

Three-Paper Model

The three-paper model is a format that is designed to encourage doctoral students to submit parts or all of their dissertation work as peer-reviewed scholarly papers while they are working to complete their dissertation requirements. The three-paper model dissertation will also have at least five chapters:

- An introduction that lays out the dissertation goals and research questions and provides a conceptual overview;
- Three chapters that correspond to three publishable or published scholarly papers; and
- A conclusion chapter that summarizes the research, interprets the findings, discusses limitations, and presents the implications for the field.

The dissertation may also include additional chapters or appendices that present methods or results that were not included in the scholarly papers but that are part of the dissertation work that led to the papers.

The three-paper model has the following additional requirements:

1. The three papers must represent a cohesive scientific inquiry by being thematically linked, either by their theories, methods, or problem area.
2. The general expectation is that the papers are being produced for high-visibility scientific journals in the disciplines relevant to the research and the student's career goals. Other dissemination vehicles and venues (e.g., conference proceedings, book chapters, white papers) are allowed with approval of the Dissertation Chair.
3. The student must be the first author on all three papers, unless data-use agreements preclude this. Authorship decisions on the papers should be driven by established professional and ethical guidelines.
4. Although not required, it is highly encouraged to have some connection between the Dissertation Committee, the authors, and the collaborators on the three papers.

5. The timing of the submission of the dissertation papers to peer-reviewed outlets should be discussed with the Dissertation Chair. Typically, dissertation papers will not be submitted prior to the Dissertation Proposal to allow for thorough feedback from the Dissertation Committee.
6. If during the preparation of a three-paper model dissertation the student feels that a traditional thesis-style format would be more feasible and appropriate, the student may switch models with approval from their Dissertation Chair and the Program Director.

Step 3: Submit the Dissertation Proposal

After the Qualifying Exam is passed, the student is authorized to proceed with submitting their Dissertation Proposal. This proposal, which must be submitted to the members of the projected Dissertation Committee, must contain the following:

1. A description of the research problem and its rationale;
2. A conceptualization of the literature pertinent to the problem, followed by a concise statement of the research question(s) and hypotheses; and
3. A detailed description of the methods to be used in the investigation of the problem, including consideration of the population to be studied, sampling, and plans for data analyses.
 - Investigations of an inductive nature, which do not lend themselves to the above format, are also permitted when this approach is the most appropriate to add to the evidence base in the substantive area of interest.
 - In all cases, however, there must be sufficient information to evaluate the merit of the study and the feasibility of the research methodology.

Length is not an indication of merit for dissertation proposals. Excellent examples of proposals ranging in length from 40 to 100 pages can be found in the SPH PhD Student Resources Box folder.

A hearing must be scheduled for the proposal with a minimum of four committee members present. Ideally, the student's fifth external committee member should also be present at the proposal hearing, but the hearing can proceed with a minimum of four members.

The Notice of Title, Scope, and Procedure of Dissertation Form is used to gather signatures of the Chair and committee members. The completed Form must be submitted at least six months before the final oral defense of the dissertation. Submission of the Title, Scope, and Procedure Form after approval of the Dissertation Proposal shifts the individual from PhD Student to PhD Candidate. This form is located on our SPH Student Resources internal site.

Step 4: Abide by the Framework of Dissertation Requirements & Human Subjects

The Doctoral Council has established a framework of requirements for all Washington University dissertations. *Please refer to the minimal requirements for dissertations in the Doctoral Dissertation Guide.* Within a dissertation, the framework grants individual programs the latitude to permit the use of copies of papers authored or co-authored by the degree candidate but insists that the dissertation must contain elements unifying the entire body of work. Also, the contributions of the candidate must be made clear in each instance of collaborative work, and a significant part of the dissertation must rest on independent research conducted by the candidate. In particular, each dissertation must contain a review of background material placing in context the problem or problems under investigation, and it also must contain language that summarizes and discusses the principal contributions. Exceptions to the requirements may be granted under special circumstances upon approval by committee.

Prior to writing the dissertation, the candidate should obtain and become familiar with the regulations and schedule concerning the presentation and format of the doctoral dissertation found in the Doctoral Dissertation Guide.

All students planning funded or non-funded research that involves the use of individuals as research subjects must obtain approval from the Washington University Institutional Review Board (IRB) through the Human Research Protection Office (HRPO) before beginning the research. When applying for external funding to support training or research activities, it is important to note sponsor guidelines pertaining to human subjects to identify the specific information that must be provided throughout the application process. Information about the university's human subject policies — including links to a resource guide, the SWAT phone number, and the ability to schedule an IRB consultation — are all available on the HRPO website. Students may also contact the School of Public Health Office of Research Affairs for additional links and resources.

Please note that, before a Human Subjects Application can be submitted to the IRB/HRPO for approval, the materials must receive the approval of the student's faculty advisor and the Office of Research Affairs.

Step 5: Apply for Program Completion in Workday

All Washington University in St. Louis students are required to Apply for Program Completion online in Workday in order to graduate. (Please consult the instructions on the Apply for Program Completion page of the Workday@WashU website.) The deadlines for filing an Intent to Graduate and for dissertation submission are listed on the Office of the University Registrar Academic Calendar. If a student misses the deadline for filing their application for program completion, they will be unable to graduate until the following graduation date.

If the student has filed the application for program completion and decides to delay graduation, the student must email the School of Public Health's Registrar's Office, the Program Manager, and the Program Director to have the program completion on file removed from their record. The student must also file a new application for the new graduation date.

Step 6: Defend the Dissertation

The terminal dates for scheduling the final oral examination in time to receive fall, spring, or summer degrees are indicated on the Office of the University Registrar Academic Calendar. At least two weeks prior to the defense date, the student should submit the Dissertation Defense Notification Form. This form collects the student's CV and the necessary approvals for the Registrar. The Registrar will document the dissertation defense notification as a milestone in the student's record.

The student assumes responsibility for making the full text of the dissertation accessible to all members of the final examination panel for their review at least two weeks in advance of the examination. The final oral examination focuses on the subject matter of the candidate's dissertation.

The defense consists of an oral presentation of the study, its results, and its implications, followed by a discussion/question-and-answer period with the committee members. Once this is completed, the student exits the room while the committee deliberates about the success of the defense and comes to a consensus on one of these four decisions:

1. Pass with no recommended changes;
2. Pass with changes that are to be made in concert with the chair's approval;
3. Pass with changes that individual committee member(s) want to view before submission of the document; or
4. Did not pass as the student has not met sufficient standards and must do further work and attempt a second defense.

Once the student has passed the dissertation defense, the student must complete the Dissertation Defense Exam Approval Form. This form must be signed by all of the Dissertation Defense Committee members and the Program Director.

Note: The oral defense of the dissertation is an oral examination of the student (i.e., an oral presentation) and as such is treated as a confidential assessment of the student's achievement. Open defense is permitted and highly encouraged by the School of Public Health, but it is not required. In consultation with the Chair, students can choose to allow any or specific audience members to attend. The audience members are not allowed to speak during the presentation and must exit the room with the student after the presentation while the committee members deliberate following the presentation and discussion. Accommodations should be coordinated with the Program Manager.

Dissertation Dissenting Votes

For the rare cases in which faculty members raise concerns that cannot be resolved through subsequent revisions and which therefore result in dissenting (negative) vote(s), the Committee Chair will refer the case to the Program Director. If the Program Director is on the committee, they will designate an outside faculty member to mediate. In the case of one or more dissenting votes, the Committee Chair and the dissenting voter(s) will be asked to explain the reasons for the dissent in a letter to the Program Director or their designee. After consulting with these and other members of the committee, the Program Director or their designee may accept the majority opinion and approve the dissertation or seek the opinion of an additional reader. After considering this additional evidence, the Program Director or their designee must approve or decline the dissertation. Failure to enlist a designee will be tantamount to a rejection of the dissertation.

Step 7: After the Defense

After making any requested changes and submitting the Dissertation Defense Exam Approval Form, the student must create an online account at ProQuest and submit the final text. Search for "Washington University in St. Louis School of Public Health" in the Find Your School section. The submission website requires students to choose among publishing and copyrighting services offered by ProQuest ETD Administrator, but the university permits students to make whichever choices they prefer. The final text submitted in ProQuest must follow WashU dissertation guidelines, including font type and size, page number styles, table and image styles, and table of contents formatting. *Students are highly encouraged to read the "Dissertation Guide" on the Vice Provost for Graduate Education website.* Once the dissertation has been delivered, the student may be charged a fee by ProQuest to make changes, so the dissertation should be in its final form upon submission.

Students who defend their dissertations successfully have not completed their PhD requirements; they finish earning their degree only when their dissertation submission has been accepted in ProQuest. The dissertation submission deadlines can be found on the Office of the University Registrar Academic Calendar.

In order to leave time to make any necessary revisions following the oral defense and to upload the final document to ProQuest, students are advised to plan for a minimum of two weeks between their oral defense and the official filing deadline.

Additional Steps Prior to Graduation

Survey of Earned Doctorates

The student must complete their Survey of Earned Doctorates prior to the dissertation deadline. They should do this as soon as possible to ensure that their response is received ahead of the degree date and the dissertation submission deadline. The electronic submission of the dissertation will not be processed or approved until this email arrives. The student will need to complete the Survey of Earned Doctorates and provide email proof of completion to their Program Manager.

Doctoral Exit Survey

The survey administered by the Office of Institutional Research gives graduating students an opportunity to evaluate WashU, their doctoral program, faculty advising, and professional development and to report on their plans for the future. The survey is sent via email from the Office of Institutional Research to PhD graduates each season (May, August, and December). If the student does not plan to graduate and received this in error, they should email institutionalresearch@wustl.edu to remove their name from the list.

Final Records Review

The student should work with the Program Manager to ensure that all PhD forms are completed and that there are no I, IP, or N grades on their transcript.

Step 8: Commencement

The May commencement ceremony is an annual event designed to publicly confer the earned doctorate to graduates from the recently completed spring semester as well as from the previous December. August and December graduates may return to campus the *following* May for the graduation ceremony. In limited situations, students who will be graduating in August may walk at the May ceremony in the year of their graduation only if they have defended successfully by May 1. Students should ensure that they submit all required forms and complete required steps on the Commencement website if they would like to participate in the May graduation ceremony.

Participation in graduation ceremonies is reserved exclusively for those who have successfully completed all aspects of the dissertation process. After review and approval by the program, the Office of the University Registrar will post the student's degree and conferral dates to their record. If the student fails to complete their degree requirements, they must refile the Application for Program Completion for a subsequent degree period.

Faculty Departures

Committee Chairs and members who go on sabbaticals or leaves of absence and who are temporarily non-residents at Washington University may continue their roles as Chairs with approval of the Program Director. If a Committee Chair ceases to be employed by the university, the student may request that the faculty member continue to serve as Co-Chair of the committee. Another member of the committee must agree to serve as the Co-Chair, with the consent of the original Chair, the student, and the Program Director. Then, the new Co-Chair should take the responsibility of providing the day-to-day guidance and decision making for the student's research and writing process. The Co-Chair structure is reserved for exceptional cases; the normative structure continues to be a sole Chair. A Co-Chair who is not able to commit sufficient time to the role should step down and allow a different committee member to take their place. A Co-Chair arrangement must always benefit the student, who has the freedom to choose their advisor, as well as the faculty members involved. If an authorized committee member ceases to be employed by the university, the student may request that the faculty member continue to sit on the committee. Consent from the faculty member and approval by the Program Director will include a decision about whether the departing faculty member should be one of the four authorized members or an external member.

Faculty Advising

We believe that students thrive when they can engage in advanced study knowing that their progress and interests are supported. We employ a comprehensive advising system for School of Public Health PHS PhD students that incorporates academic and career advising, peer support, and professional development to support student success in the program as well as in their future careers. The PhD Program Director provides coaching and advice throughout a student's tenure at the School of Public Health regarding matters of policies, procedures, and academic life at Washington University. New students are admitted under a primary faculty mentor who serves as their Faculty Advisor throughout the duration of the program. While only one faculty member typically serves as a student's lead advisor, students are encouraged to develop several additional substantive advisors. These advisors work with the student to further articulate areas of interest and to identify relevant social science and methods coursework, to develop research and teaching experiences, and/or to become members of the student's Dissertation Committee (consult the Dissertation Process tab of this page (p. 94)).

Peer support is also formally integrated into the professional development seminar as well as informally incorporated through a variety of social and academic gatherings. These efforts ensure that first-year students have adequate support in the various aspects of adjusting to the school and in making an informed decision about coursework and other aspects of the doctoral program.

Faculty advisors take primary responsibility for the Qualifying Exam process (consult the Qualifying Exam tab of this page (p. 93)). Second-year students work actively with their primary advisors and with other engaged faculty advisors to clarify and develop their area of specialization and to collect a body of research to synthesize for the Qualifying Exam. The primary advisor (chairperson) will assist the student with identifying faculty members for the Qualifying Exam Committee and with selecting courses to meet program requirements. Usually, the person who chairs the Qualifying Exam Committee also serves as the Dissertation Chair.

Each year, the advisor and the student complete an assessment of progress that identifies strengths as well as any planned efforts to address barriers to success. This process also assists the student with identifying the timeline for major program requirements (e.g., qualifying exam, proposal, dissertation).

Faculty Advisor Responsibilities

Submission of Annual PhD Student Academic Progress Report

The Annual PhD Student Academic Progress Reports are due in the spring of each year. The Program Manager collects information through the following processes. First, the student completes a self-assessment of progress and then submits the form and their CV, which is sent to the faculty advisor/chair for review and completion. Faculty advisor feedback and a review of the student's transcript provide additional information to be incorporated into a signed letter from the Program Director summarizing the student's progress and making recommendations for the coming year. The final signed letters are emailed to the student and the faculty advisor and stored electronically by the Program Manager.

PhD Forms

There are several forms required to document milestones in the program. These require timely review and approval by the faculty advisor once they have been submitted by the student.

Mentored Teaching and Research Experiences

All forms must be completed online by the student and authorized via electronic signature by the appropriate parties for approval. This includes the course instructor who supervises the experience, the primary advisor, and the Program Director.

Qualifying Exam (p. 93)

Prior to beginning the dissertation, students must demonstrate mastery of the literature in a given area that provides the backdrop for the dissertation proposal. The Qualifying Exam reflects an understanding of the larger area of interest, the assessment of the state of the student's knowledge, and gaps in the scientific literature. The forms associated with the Qualifying Exam include the Committee Approval Form and the Final Grade Change Form.

Doctoral Dissertation Research (p. 94)

After the Qualifying Exam has been successfully completed, students begin the dissertation process. This includes proposing an empirical approach for addressing an important question identified by the student and then conducting research and disseminating its results under the mentorship of the Dissertation Committee. The process aims to demonstrate the student's mastery of a specific field of knowledge and their capacity for original scholarly work. There are forms associated with various steps of the dissertation process, including the Notice of Title, Scope, and Procedure of Dissertation Form; the Dissertation Committee Approval Form; the Dissertation Defense Notification Form; and the Dissertation Defense Exam Approval Form.

Change of Advisor

The relationship between an advisor and an advisee is critical to the success of a student in a PhD program. If a situation arises in which it is determined that the existing advisor/advisee relationship should be terminated, either by the advisor or the advisee, the student will enter into a three-month probationary period so that the student can identify a new dissertation research advisor. The student will continue to receive the customary stipend (if appropriate) and allowances until an advisor for the dissertation research is identified or for three months, whichever comes first. After the three-month period, the student will either have established a new advisor/advisee relationship or, at the discretion of the program, may be provided a second three-month probationary period. At the end of either probationary period, the student may be dismissed from the program as not having made the appropriate academic progress. A third probation will not be permitted. A student is able to appeal the probation decision following the appropriate procedures as outlined in our policies section.

Best Practices for Inclusive Mentoring

As part of the School of Public Health's PHS PhD Program community, our faculty are committed to acting with integrity and using best practices in their work with our doctoral students. Below is a useful checklist to inform the mentoring approach.

- Develop a communication plan with the advisee (e.g., a regular meeting schedule, the big-picture purpose of meetings, expectations regarding communication outside meetings).
- Clarify roles, expectations, and boundaries of the advisor/advisee relationship,
- Create an advisement meeting schedule to regularly check in with the advisee.
- Unforeseen events may occur that require adjustments to the check-in schedule, but advisors should provide timely notice for any large gaps in availability due to extended travel for research or sabbaticals. Sabbaticals are typically one semester in length and do not require a change in advisor, but they do require an agreed-upon means of a student receiving feedback and getting any necessary forms approved.
- Discuss the student's learning style, needs, and interests.
- Discuss the mentor's learning, teaching, and advising styles.
- Develop a plan to help the student develop competencies (e.g., teaching, presenting at conferences, academic writing and publication)
- Promote an environment of psychological safety in which the advisee is able to develop and grow.
- Periodically evaluate the advisor/advisee relationship, and make adjustments as needed.

Note: The PHS PhD Program Director and Program Manager are happy to answer questions at any time. The program also hosts information sessions and updates about our PhD Program periodically throughout the academic year, including mini-sessions held during faculty meetings and at all-school assemblies.

Fellowships, Funding, and Benefits

Please expand the sections below for information about this program's financial policies and practices.

Stipend

All School of Public Health PhD Students receive a monthly stipend beginning in August of the first academic year of full-time enrollment. As of the 2026-27 academic year, the minimum 12-month stipend is \$37,853. The stipend amount is detailed in the admission offer letter for each first-year admitted student. Stipends are eligible for renewal for a maximum period of five years for full-time enrolled students making satisfactory progress in the PhD program.

Stipends support full-time program-related activities, including coursework, practica, qualifying exams, dissertation research, as well as service to the SPH. Service typically takes the form of contributing no more than 20 hours per week on SPH faculty research that aligns with and achieves the student's training goals. Students are admitted under a primary faculty mentor and will conduct some of their mentored research within that faculty member's lab. Students have the opportunity to work with other faculty members through their teaching and research practicum courses.

The PHS program uses a shared funding model to cover student stipends. Student stipends are funded through a variety of sources, examples of which include the following:

- Faculty funding provided by the primary mentor
- Fellowships and grant funding secured by the student (e.g., NIH F31)
- Institutional training grants (e.g., NIH T32, NSF NRT)
- University fellowships (e.g., Ann W. and Spencer T. Olin-Chancellor's Fellowship, McDonnell International Scholars Academy Fellowships, Ministry of Education (MOE) Fellowship)

The SPH will provide additional stipend support for students admitted to the program on institutional training grants and university fellowships that fall below the minimum stipend amount or the maximum number of years. For instance, the school will cover any annual stipend cap gap, which is the difference between the funder's standard stipend and WashU's support level. Likewise, the school will be responsible for the remaining years of the stipend for fellowships that cover only two years (e.g., NIH/NSF fellowships) or four years (e.g., McDonnell Scholars).

Students who receive additional grants or fellowships should provide their award letters to the Program Manager to ensure that records are updated and stipends are funded using the appropriate sources.

Tuition and Fees

The maximum tuition fee is the equivalent of 9 semester credits. Students who enroll for 9 or more credits per semester are automatically regarded as full-time students and are charged a flat full-time rate. Students must enroll in at least 9 credits of coursework or the Doctoral Research course to maintain full-time status. Failure to register risks satisfactory academic progress and university benefits. *To avoid a gap in insurance coverage during the summer, students must be sure to enroll in 9 credits or in the full-time Doctoral Research course by July 31. The tuition rate and fees are subject to annual change; however, School of Public Health doctoral students receive full tuition remission for these charges.* **Note:** Students who do not register for at least 9 credits or the Doctoral Research course by the add/drop deadline each semester could lose university benefits, visa status, and even be required to take a semester of leave.

Tuition Remission

The School of Public Health provides tuition remission for the length of the student's program as long as academic progress is being made. To be eligible for tuition remission, courses must be taken at the graduate level. These include most School of Public Health, Brown School, and School of Medicine courses and skill labs as well as courses numbered in the 5000s and above in other Schools. Courses offered through WashU Continuing and Professional Studies are non-remissible, and School of Public Health students cannot audit these courses.

Note: Tuition remission for WashU graduate courses outside of the School of Public Health only covers courses taken in the fall and spring semesters. Summer courses must be School of Public Health courses to be eligible for tuition remission.

Students wishing to enroll in courses outside of these parameters and receive tuition remission must submit a justification of the relevancy of these courses to their program with approval from their advisor to the Program Director. Likewise, doctoral students should discuss and receive permission from the program in advance if seeking remission for the cost of educational or training opportunities besides courses (e.g., summer institutes, professional development, external trainings, unrelated master's degrees). Tuition remission is not guaranteed for non-program-related coursework. Students pursuing a certificate or an unrelated master's degree in addition to their PhD must consult the Program Director and their advisor about credit sharing between programs.

Health Insurance

All full-time students on the Danforth Campus are charged a mandatory health fee that gives them access to the Student Health Center. In addition, they must either enroll in the student health insurance plan or present proof of comparable coverage. International students are not allowed to waive health insurance. Both the health fee and the health insurance premium are subject to annual change.

The School of Public Health fully covers the costs of the mandatory health fee, student health insurance, and the optional dental insurance fees for the student. Spouses and dependents may also be covered for an additional fee. Students receiving special fellowship support may have different arrangements for covering their health fees and insurance. Information about healthcare coverage can be found on the Student Health Center – Danforth Campus website. Students should consult their Program Manager with specific questions.

The Student Health Center, located in the Nathan Dardick House (lower level) at the corner of Shepley Drive and Big Bend Boulevard, serves all full-time students and their spouses/domestic partners. Full-time students are automatically enrolled in the student health insurance plan upon completion of registration each semester. Failure to register in courses on time jeopardizes full-time student status and health insurance coverage.

Dental Insurance

Students interested in enrolling in the optional dental insurance plan must be enrolled in the student health insurance plan. The School of Public Health fully covers the dental insurance premium for the student. Students may also enroll their spouse and/or dependents but will be responsible for paying those fees on their own. Students may elect to opt out of the dental coverage by contacting studentinsurance@wustl.edu. Once the student has requested to opt out of the insurance at the time of the deadline listed on the student health service website, their student account charge will be reversed within 7 working days. Dental benefits can be found on the UnitedHealthcare Student Resources website.

Notes:

1. Students will only be eligible to remain on the dental plan if they are on the medical plan. If a student waives the medical plan, they are not eligible to remain on the dental plan.
2. Students may enroll dependents on the dental plan by contacting UHC directly. The student must be on the dental plan in order to enroll their dependents. The stipend *does not* cover the additional cost of dependents.
3. The stipend does not include vision insurance. Students may enroll in vision insurance directly through UHC, but they will be responsible for those fees.

Part-Time Employment

If a full-time supported doctoral student wishes to accept part-time employment within Washington University or outside of the university, the following guidelines must be followed. The Internal Revenue Service, the Washington University Human Resources Office, and U.S. Citizenship and Immigration Services all make important distinctions between students and employees. These guidelines are designed to assist doctoral students in retaining their status as students.

School of Public Health doctoral students receiving stipends or fellowships are allowed a maximum of 10 hours per week on average of additional part-time employment during the fall and spring semesters while maintaining their status as a full-time student. Students can work up to 20 hours per week, on average, during the summer. International students should consult with the Office for International Students & Scholars regarding requirements, and all students must consult and receive approval from their advisor and Program Director in order to accept an additional position outside of the stipend or fellowship. Fully supported students engaged in part-time employment may have a reduction to — or even cessation of — their stipend from the program.

School of Public Health students *not* receiving stipends or fellowships and who have yet to complete PhD requirements, must enroll in Doctoral Research. Enrollment in Doctoral Research confers full-time student status and continues student access to health insurance, university resources, and loan forbearance (consult Enrollment Extension and In-Absentia Enrollment). Unfunded continuing students may work up to 20 hours per week on average throughout the year if

approved by their faculty advisor and Program Director. The request for outside employment may be denied for any reason related to research or academic progress. If approved, the student must abide by all applicable university, IRS, and immigration policies. The student also must keep their advisor and Program Director informed of all activities. PhD students who are not registered or non-compliant with the above policies may find themselves in a part-time status and could be in jeopardy of the loss of certain benefits or be in violation of their visa status. Part-time enrollments will be permitted only in extraordinary circumstances.

PhD Student Taxes

The Internal Revenue Service expects fellowship students to make quarterly estimated tax payments because the university does not withhold federal taxes or Social Security payments from non-work-related fellowships. Failure to make quarterly tax payments and/or to file a tax return could result in penalties. Visit the IRS website to receive necessary forms.

International Students and Taxes

International students will need to be informed about U.S. federal tax as nonresident aliens, if they are new to the United States. For more information about tax regulations for international students, please visit the Taxes in the U.S. page of the Office for International Students & Scholars website.

IRS laws and regulations require that the university apply special tax withholding and reporting regulations to all payments made to those individuals who are treated under U.S. tax laws as "nonresident aliens." The department requesting the payment to the individual is responsible for the collection of all required information; the Office of International Students and Scholars is responsible for analyzing the required information and making any U.S. residency or tax withholding determinations. The student should make arrangements to obtain a social security number (SSN) or an individual tax identification number (ITIN) as soon as possible. The department should assist the student with this process as needed.

Child Daycare Subsidy

The purpose of the Child Daycare Subsidy, which is sponsored by WashU, is to help the families of PhD students meet the costs of child daycare while the students pursue their studies. The amount of child daycare subsidy awarded to eligible applicants depends on their financial need, the number of children they have enrolled in child daycare facilities, their child daycare expenses, and available funding.

Requirements for Eligibility

- Be enrolled full-time in a WashU PhD degree program at the start of the award period.
- Be the parent of a child under the age of 5, a child between 5 and 6 years old who is currently ineligible to attend kindergarten due to their date of birth, or a child with special needs under the age of 19.
- Incur child daycare expenses from a facility, center, or provider.
- Apply for any available scholarships and aid at their chosen provider before applying for the Washington University child daycare subsidy.
- Be making satisfactory academic progress, as defined by their school/program.
- Utilize child daycare services because you are a single student or, if you are married or have a partner, because your spouse or partner is either a student (enrolled full time in an undergraduate or graduate degree program) or employed outside the home for a minimum of 20 hours per week. You will be asked to attest to your spouse's or partner's employment or student status.
- Complete the daycare subsidy application by the deadline for each semester.

Child Daycare Subsidy Process

PhD students interested in receiving the child daycare subsidy will complete a centralized application form found on the Office of the Provost website each fall and spring semester. The subsidy is not available during the summer term. Applications will route to the appropriate representative in the student's selected school based on information communicated to Office of the Provost staff. A financial administrator from each school/program will be responsible for reviewing the application to ensure the student meets the stated criteria. Eligible students will receive subsidy payments in the same format as they receive their stipend payments.

The application will request the initial information necessary to make most determinations. On occasion, school administrators may need to request supplemental information from the student in order to make a determination regarding eligibility. Questions not addressed in this document may be posed to the Vice Provost for Graduate Education/Office of the Provost for clarification.

The Office of the Provost will be responsible for gathering and maintaining data for reporting purposes. Schools are requested to keep track of requests and payouts.

As students are approved for the subsidy, the school is responsible for notifying the student of their award and ensuring the payout. The subsidy will be paid as a lump sum. Students' applications must be received by the end of the term in which they are requesting the subsidy.

Award amounts are available in the Frequently Asked Questions section of the Child Daycare Subsidy webpage.

Professional Development Funds

Full-time PhD students (who are taking courses or registered for Doctoral Research) may apply for up to \$1,000 in reimbursement for professional development per year. Funds are available beginning July 1, and reimbursement requests must be submitted to the Program Manager by June 1. Unused funds do not roll over. Requests for reimbursement should be submitted to the Program Manager within 15 days of purchase or travel dates.

For a list of approved items and instructions for reimbursement, consult the SPH Guide to Professional Development Funds.

Note: Program Managers/Directors/School of Public Health Finance staff reserve the right to deny professional development fund requests. A student's request is not fully approved by the PhD Program until that student asks for permission from the Program Manager and the Program Manager responds with an approval email. If the student is funded through a T32 grant, they should work with Stacey McCrary (stacey.mccrary@wustl.edu) regarding additional guidelines and restrictions.

SPH PhD Fellowship Guidelines

School of Public Health and University Fellowships Awarded at Admission

All School of Public Health PhD Students receive an annual School of Public Health Fellowship in the form of a monthly stipend beginning the first academic year of full-time enrollment. The stipend amount is detailed in the admission offer letter for each first-year admitted student. Stipends are eligible for renewal for a maximum period of five years for full-time enrolled students making satisfactory progress in the PhD program.

Institutional Training Grant Awards and Fellowships

The School of Public Health and Washington University offer additional awards and fellowships to students meeting specific eligibility criteria. Such awards and fellowships are designed to provide specialized training in a specific area of research and/or to increase the diversity of the future workforce trained in a particular area. These awards may differ in amount and maximum years of funding from the standard School of Public Health Fellowship. An award made at admission by the university either partially or fully replaces the School of Public Health Fellowship as detailed in the admission letter (or in a separate subsequent fellowship letter that supersedes the School of Public Health admission offer letter).

Such grants/fellowships may have separate application processes, terms, and training or other requirements. Examples of Institutional Training Grant Awards and Fellowships awarded in recent years have come from such sources as the National Institute of Mental Health (NIMH T32), the National Institute on Drug Abuse (NIDA TranSTAR T32), the Buder Fellowship, the Ann W. and Spencer T. Olin-Chancellor's Fellowship, the McDonnell International Scholars Academy Fellowships, and the Ministry of Education (MOE) Fellowship.

Students are strongly encouraged to consult the respective Washington University Training Grant (T32) Director or other fellowship directors for any questions or concerns regarding eligibility criteria, application deadlines, additional work restrictions, restrictions regarding holding other stipends/fellowships, and the specific terms of such grants and awards prior to acceptance of these awards.

Pre-Dissertation and Dissertation Funding

Students entering the dissertation phase of their studies are eligible to apply for special funding designed to assist them with expenses related to their writing and research.

Public and private (extramural) dissertation grants (in varying amounts) are available to students through a competitive process. Students are encouraged to apply for extramural funding (i.e., funding from outside entities) throughout their doctoral program in alignment with their training goals to support their pre-dissertation and dissertation scholarship and research.

- All students must make an appointment with the Research Development Office several months before attempting to apply for one of these grant awards.
- To make an appointment or to ask any questions, contact the Director of the Research Development Office.

Examples of extramural pre-dissertation/dissertation funding awarded in recent years include the NIH F31 grant, the National Institute of Justice Dissertation Fellowship, the Council on Social Work Education Minority Fellowship Award, the Doris Duke Foundation Award, the AGE-SW, U.S. Fulbright awards, Fahs-Beck awards, and American Cancer Society awards. Students can also apply for outside travel awards from national and professional organizations to support attendance/participation at conferences or specialized training institutes. Students who successfully compete and receive such awards may simultaneously receive the School of Public Health Fellowship (described above). Students on internal School of Public Health and university-level fellowships must check with the Fellowship Director to determine any restrictions related to applying for and receiving such extramural funds.

Housing/Transportation Resources

Doctoral education often means that students are relocating to St. Louis for their degrees. There are a number of resources offered by the university around housing, transportation, and supports for both domestic and international students. All students are eligible for a free UPass, which covers universal rail and bus transportation across the St. Louis area. The Graduate Center maintains a Resources page that links to many of the resources named above.

Administration

Dean

Sandro Galea

Margaret C. Ryan Dean

Eugene S. and Constance Kahn Distinguished Professor in Public Health

Andrew M. and Jane M. Bursky School of Public Health
Vice Provost for Interdisciplinary Initiatives for WashU

Associate Deans

Caitlin Bristow

Associate Dean for Institutional Development and External Affairs

Debra Haire-Joshu

Associate Dean for Faculty Affairs

Joyce and Chauncy Buchheit Professor in Public Health

Sunghei Han

Associate Dean for Administration

Angela Hobson

Associate Dean for Education

Professor of Teaching

Jennifer E. Layden

Associate Dean for Practice

Professor

Morven McLean

Associate Dean for Innovation

Professor of Practice

Catherine Oldenburg

Associate Dean for Research

Professor

Amanda Rhodes

Associate Dean for Strategic Initiatives

Chief of Staff

Admissions

For more information, visit the Admissions page of the Bursky School of Public Health website.

Application Processes

All Bursky School of Public Health (SPH) degree-seeking applicants are required to apply through SOPHAS, the centralized application service for public health. SOPHAS is a service of the Association of Schools and Programs of Public Health, which represents Council on Education for Public Health-accredited schools and programs of public health. Bursky School of Public Health offers application and admission on a modified-rolling basis, with one class admitted each year for the fall semester. MPH applicants are encouraged to apply early for priority consideration for admission and scholarship. Doctoral applications are due December 1 of each year; the first priority deadline for MPH applicants is December 1, and the following deadlines can be found on the WashU Public Health website's "Apply to master's programs" page. Bursky School of Public Health participates in the Council of Graduate Schools' April 15 resolution, an agreement among the signatory graduate schools to provide applicants until April 15 to consider offers of admission that also include financial support.

MPH Application Requirements

Applications must be submitted through SOPHAS. In addition to the SOPHAS application fee requirement, the following materials must be submitted to complete the MPH application:

- Academic transcripts
- Personal statement
- Resume or CV
- Video interview
- Three letters of recommendation
- Human biology prerequisite

International applicants are subject to additional requirements, including the following:

- A NACES-certified foreign-credential evaluation that displays a U.S. bachelor's-equivalent degree
- English language proficiency

For more detailed descriptions of each application requirement and additional requirements for dual degree, 3-2 degree, and transfer credit applicants, please consult the Bursky Public Health website's "Apply to master's programs" page.

Readmission and Reinstatement

Students requesting a return to Bursky School of Public Health must first contact the Bursky School of Public Health Academic Records Office for an audit of their academic record. The registrar will inform the student whether the student must complete an application for readmission or reinstatement, as defined below:

Readmission

Students in the following categories must reapply through the Bursky School of Public Health Office of Admissions and Recruitment:

- *Academic Dismissal:* Students who have been dismissed for academic reasons by Bursky School of Public Health
- *Inability to Complete Program Within Required Timeframe:* Students who completed some Bursky School of Public Health coursework but left the program for a period of time and cannot complete their degree within four years from their initial date of matriculation into the program

Reinstatement

Students in the following categories must complete a Request for Reinstatement with Bursky School of Public Health:

- *Administrative Financial Withdrawal:* Students who have been administratively withdrawn from Bursky School of Public Health due to failure to pay tuition and/or fees or another outstanding balance on the student's account
- *Administrative Withdrawal (nonfinancial):* Students who miss one semester of registration (excluding summer) will be discontinued and administratively withdrawn from their program.
- *Personal Leave of Absence:* Students who elect to temporarily interrupt their progress toward their degree for a personal, nonmedical reason
- *Medical Leave of Absence (requires additional approval from WashU Cares):* Students who, voluntarily or involuntarily, must temporarily interrupt their progress toward their degree due to a physical or mental health need.

Voluntary Withdrawal

This group includes students who elect to voluntarily withdraw from Bursky School of Public Health and discontinue their program of study. Students with accounting holds must clear their balance with student accounting before any application for readmission or reinstatement is considered. Credits for previous Bursky School of Public Health coursework taken prior to a student's return are not automatically counted and must be reviewed by the Office of Admissions and the Bursky School of Public Health Registrar. Bursky School of Public Health coursework completed more than six years prior to reinstatement or readmission will not be considered for credit toward the degree.

Decisions regarding reinstatement or readmission may be based on the applicant's academic status when last enrolled, their activities while away from campus, the length of their absence, the potential for successful completion of the program as determined by Bursky School of Public Health, the ability of the department to support the applicant both academically and financially, as well as other relevant factors or considerations. Due to enrollment limitations, there is no guarantee of approval for reinstatement or readmission.

Application Deadlines for Readmission or Reinstatement

Readmission

Students must adhere to the dates and deadlines that are set by the Office of Admissions & Recruitment.

Reinstatement

A completed Application for Reinstatement must be received by the Bursky School of Public Health Office of the Registrar *six weeks prior to the first day* of the term in which enrollment is requested. After this date, the application will be reviewed for reinstatement in the subsequent term. Once the application has been reviewed and a decision has been made, the student will receive a notification via email.

Reinstatement From a Medical Leave of Absence (LOA)

- Any student requesting return from a medical LOA must follow the deadlines above in addition to obtaining approval from WashU Cares prior to returning.
- *To return in the fall semester:* Submit a request to WashU Cares between June 1 and July 1.
- To return in the spring semester: Submit a request to WashU Cares between November 1 and December 1.
- WashU Cares does not allow reinstatement for the summer session.
- Detailed information about a medical LOA reinstatement can be found on the WashU Cares website.

Degree Requirements for Students Approved to Return to Bursky School of Public Health

Students Approved for Readmission

- The student is responsible for completing the degree requirements at Bursky School of Public Health in effect at the time of their new matriculation semester.

Students Approved for Reinstatement

- Within the first two weeks of the semester in which the student returns from their LOA, they are required to meet with their academic advisor to create an academic success plan for the remainder of their program.
- The student must be able to complete their degree requirements within four years from the original date of matriculation.
- Students must complete the degree requirements outlined in the Bursky School of Public Health Handbook from their original matriculation semester.
- At the discretion of the program, if course offerings have changed as a result of revised degree requirements, the program may require the student to complete additional courses, exams, and/or requisites for completion of the degree.

Scholarships/Tuition

Scholarships/Tuition for Readmission

- Students approved for readmission are no longer eligible to receive scholarships previously awarded by Bursky School of Public Health.
- Students will be reconsidered for merit-based scholarships by the Office of Admissions & Recruitment in the same manner as students applying to Bursky School of Public Health for the first time.
- Students should contact the director of Student Financial Services regarding reapplying for federal student aid.
- The student will be assessed tuition and fees according to the current tuition rate/structure in effect for the academic year in which they return to the SPH.

Scholarships/Tuition for Reinstatement

- Students approved for reinstatement will receive any remaining funds from the scholarship award offered when they were first admitted to the program.
- Students will be assessed tuition and fees according to the tuition rate/structure in effect for the academic year in which they return to the SPH.

Doctoral Application Requirements

All applicants must have completed a graduate degree in public health or a related discipline prior to the fall semester in which they wish to enroll. Applications must be submitted through SOPHAS. In addition to the SOPHAS application fee requirement, the following materials must be submitted to complete the PhD application:

- Transcripts
- Curriculum vitae or resume
- A personal statement
- One writing sample
- Three letters of recommendation
- English proficiency, if required

Academic Policies

Advising

MPH Advising

MPH students benefit from a network of support that ensures their academic, professional, and personal success. During their time at Bursky School of Public Health, students are assigned to three advisors who provide expertise, guidance, and support:

1. A Faculty Advisor who is a faculty member or practitioner in the field;
2. An Academic Advisor who is a staff member at Bursky School of Public Health; and
3. An Applied Practice Advisor who is a faculty member at Bursky School of Public Health and within the Office of Student Applied Practice Experience.

Faculty Advisors

- The Faculty Advisor will meet with students during their Capstone I semester.
- Faculty Advisors are also available to do the following:
 - Guide the academic and professional development of students.
 - Work with students to develop career options.
 - Assist advisees with integrating fieldwork and classwork.
 - Make appropriate referrals to student support services and be available to discuss students' concerns.
 - Choose whether or not to host formal or informal group sessions with all students in a particular area of interest.

Academic Advisors

Academic Advisors will do the following:

- Advise and approve students' course schedules prior to registration for every semester.
- Communicate with students regarding curriculum policies and procedures.
- Ensure students' plans of study are consistent with curriculum requirements, including but not limited to foundation courses, concentration requirements, and course sequencing.
- Make appropriate referrals to student support services and be available to discuss students' concerns.
- Assist with the academic and professional development of their advisees.

Applied Practice Faculty Advisors

Applied Practice Faculty Advisors will do the following:

- Assist students with identifying, securing, preparing for, and evaluating practicum experiences.
- Orient, guide, and assess student progress in all areas of the applied practice experience.
- Maintain close collaboration and consultation with the practicum agency.
- Conduct individual site visits at the midpoint of all practicum placement sites.
- Teach Foundations of Applied Practice to all MPH degree-seeking students.

Outcomes of a Successful Advising Model

Students will do the following:

- Feel supported and informed.
- See a high level of collaboration between Faculty Advisors, Academic Advisors, Applied Practice Faculty Advisors, the Center for Career Engagement, and other student support services, which ensures a holistic approach to mentoring, coaching, and monitoring.
- Engage with faculty and practitioners who focus on career, professional development, and networking.
- See continuity and consistency in service and information delivery.
- Find support in managing their academic, professional, and personal concerns.
- Have access to advisors who can communicate the technicalities of the degree program.
- Be referred to the appropriate student support services.

PhD Advising

Consult the PhD Faculty Advising page (p. 98) for more information.

Academic and Professional Integrity

As local, national, and international leaders in public health, the faculty, administration, and staff of Bursky School of Public Health at Washington University in St. Louis are strongly committed to both academic and professional integrity. Academic integrity combines five fundamental values — honesty, trust, fairness, respect, and responsibility — for all academic work. Professional integrity involves behaviors that are consistent with the professional and ethical expectations of Bursky School of Public Health. Bursky School of Public Health students must understand the unconditional imperative for honesty and ethical behavior in all scholastic and professional endeavors as well as in everyday conduct within and beyond the Bursky School of Public Health community.

Public Health is a practice profession involving the management of complex systems and interpersonal relationships with diverse people, many of whom are vulnerable in a variety of ways for a myriad of reasons. Bursky School of Public Health students entrusted with practicum responsibilities are expected to be cognizant and respectful of all agency personnel and clients with whom they become associated. We require that students entering the Public Health profession possess the skills to manage these relationships responsibly.

Bursky School of Public Health faculty have developed a statement of expectations and procedures that help them address issues of conduct that raise serious concerns about a student's capacity for responsible public health practice.

Academic Integrity

Master's students in Bursky School of Public Health follow the undergraduate student academic integrity policy.

Doctoral students in Bursky School of Public Health follow the academic and professional integrity policy for PhD students.

Academic Integrity Violations

Academic Integrity Violations are managed by the Office of Academic Integrity.

Professional Integrity

Bursky School of Public Health minimally expects that students will do the following inside and outside the classroom, including online, when engaged with colleagues, including faculty, staff, fellow students, practicum supervisors, clients, and other constituents in university-sponsored or related programs and/or activities:

1. Conduct themselves in a manner consistent with the Public Health Code of Ethics adopted by the American Public Health Association.
2. Conduct themselves in a manner consistent with the University's Student Code of Conduct
3. Demonstrate an ability to speak, listen, and engage in a manner that is respectful, professional, and not harmful.
4. Demonstrate clarity of thinking, including an ability to process information, conceptualize, and integrate knowledge.
5. Demonstrate honesty in interactions with students, staff, and faculty and at the practicum agency and an ability to be responsible, including such things as accurately recording and reporting practicum hours, keeping appointments, and attending class regularly and punctually in accordance with instructors' policies.
6. Demonstrate an ability to suspend personal biases in professional interactions including not imposing personal, religious, or cultural values on others.
7. Represent their backgrounds, experiences, and qualifications honestly.
8. Seek and use help for medical and emotional problems that interfere with scholastic and professional performance, including engaging in treatment for substance abuse and mental disorders when needed.
9. Respond to communication and outreach from Bursky School of Public Health and Washington University faculty and staff in a timely manner.
10. Respect and maintain the appearance and functionality of all buildings, classrooms, and other facilities.

Evidence that a student is meeting or failing to meet these expectations may come from a variety of sources, including the observation of student behavior in the classroom, in the field practicum, and in interactions with fellow students, faculty, and staff; personal statements and self-assessments; recorded interview situations; and feedback from students, staff, community members, and other sources.

Professional Integrity Violations

Professional integrity violations consist of behavior that is inconsistent with professional or ethical standards in the professional roles for which the student is being trained that are not necessarily covered by policies governing academic integrity. Behaviors inconsistent with the above-listed expectations will be considered violations of professional integrity. Students with professional integrity violations may be referred to the MPH or PhD Education Subcommittees for corrective and/or disciplinary action.

Reporting Misconduct

Violations of academic or professional Integrity are taken seriously at Bursky School of Public Health, and such behaviors may result in disciplinary action against the offending student(s).

Faculty Responsibility

Faculty and instructors must report incidents of student misconduct through the Office of Academic Integrity and/or the Office of Student Conduct & Community Standards in a timely manner so that the incident may be handled fairly and in a manner consistent with other cases. Assistants to the instructor are expected to report instances of student misconduct to their supervising instructors. If a student comes to a faculty member with information about an academic or professional integrity violation, faculty members are expected to follow up on the issue and report or consult with the program director and/or the Associate Dean for Student Affairs, as needed.

Student Responsibility

If a student observes others violating these policies, they are encouraged to address their colleagues with their concerns to facilitate an opportunity to resolve the matter. If the issue is not resolved, students should report the misconduct to the instructor or seek advice from the program director and/or the Associate Dean for Student Affairs, as needed.

Field Instructor Responsibility

Field Instructors who believe that a student is not meeting one or more of these basic expectations should notify their contact in the Office of Applied Practice.

Exam Proctor Responsibility

Exam proctors are expected to report incidents of suspected student misconduct to the course instructor and/or Disability Resources, if applicable.

Academic Progress

Students are expected to maintain a high level of scholarship and active engagement in their programs of study. Students in Bursky School of Public Health are required to maintain a minimum cumulative GPA of 3.0. For 3-2 and dual degree MPH students, the requirement is to maintain a minimum GPA of 3.0 for their MPH program-level GPA. In addition, students must maintain Satisfactory Academic Progress (SAP).

Except for circumstances justifying immediate dismissal (consult Dismissal for Academic Reasons below), a student cannot be dismissed on the basis of academic performance without the opportunity to return to good standing during an identified period of probation. The purposes of probation are as follows: 1) to explicitly warn the student of their status; 2) to provide the student with clear guidelines regarding the performance that will be necessary to return to good standing; and 3) to provide the student with reasonable time to meet these expectations. To meet these objectives, Academic Concern or Academic Probation is designated for a semester (fall or spring) following the academic progress review.

Following the grading deadline each semester, all student records are examined by the MPH or PhD program. This review includes semester and cumulative grade point averages; credits earned; failing grades; withdrawals and incompletes; and progress toward foundation courses and milestones. After the review, the program may determine the appropriate academic action, which may include Academic Concern, Academic Probation, Academic Time Away, or Dismissal for Academic Reasons.

Academic Concern

Academic Concern is a proactive notification that additional support may be needed to maintain academic progress. This status is not noted on the official transcript or enrollment verifications. Academic Concern status may be applied when a student meets any of the criteria listed below.

MPH Academic Concern Criteria

- Student received an unsatisfactory or failing grade (i.e., F or NP) in a course.
- Student did not pass PHFN 5001 Biostatistics with a B– or better.
- Student earned a semester GPA or has a cumulative GPA between 3.00 and 3.10 at the end of the semester.
- Student has 7 credits or more with an unresolved grade of Incomplete (I).
- Student completed fewer than 10 credits in the semester (without prior approval for reduced course load).

PhD Academic Concern Criteria

- Student earned a semester GPA below 3.0 at the end of the semester.
- Student has failed to satisfactorily pass the Area Statement and Qualifying Exam by August 1 following the third academic year. (This is for students who matriculated in academic year (AY) 2025-26 or earlier; students who matriculated in AY 2026-27 or later are not eligible for this format.)
- Student has failed to satisfactorily pass the Oral Qualifying Exam by end of their fifth semester. (This is for students who matriculated in AY 2026-27 or later; students who matriculated in AY 2025-26 or earlier may opt in to this format with permission from the PhD program.)
- Student has not made sufficient progress on mentored research.

Students who are assigned to Academic Concern status will receive a letter from the Program Director and will be required to meet with their advisors to address the issue(s) that led to that status.

Academic Probation

Students experiencing more significant academic difficulties may be placed on Academic Probation. Students on Academic Probation are not in good academic standing. This status is not noted on the official transcript, but it is included in enrollment verifications requesting academic standing. Academic Probation status may be applied when a student meets any of the criteria listed below.

MPH Academic Probation Criteria

- Student earned a program GPA, earned a semester GPA, and/or has a cumulative GPA below 3.0 at the end of the semester.
- Student received unsatisfactory or failing grades (i.e., F or NP) in more than one course at the end of the semester.
- Student completed fewer than 10 credits in the semester (unless officially approved for reduced course load).
- Student fails practicum.
- While on Academic Concern or Probation, student did not address the issue(s) that led to that status in the previous semester.

PhD Academic Probation Criteria

- Student has a cumulative GPA below 3.0 at the end of the semester.
- Student has unresolved grades of Incomplete (I) in more than three courses at the end of the semester.
- Student failed to secure at least one primary faculty advisor by the beginning of their second semester. (This is for students who matriculated in AY 2026-27 or later; students who matriculated in academic year (AY) 2025-26 or earlier may opt in to this format with permission from the PhD program.)

- Student failed to secure at least one primary Faculty Advisor by the beginning of their second academic year. (This is for students who matriculated in AY 2025-26 or earlier; students who matriculated in AY 2026-27 or later are not eligible for this format.)
- Student has failed to satisfactorily pass the Area Statement and Qualifying Exam by August 1 following the third academic year. (This is for students who matriculated in AY 2025-26 or earlier; students who matriculated in AY 2026-27 or later are not eligible for this format.)
- Student has failed to satisfactorily pass the Oral Qualifying Exam by end of their fifth semester. (This is for students who matriculated in AY 2026-27 or later; students who matriculated in AY 2025-26 or earlier may opt in to this format with permission from the PhD program.)
- Student has not made sufficient progress on mentored research.
- Student has failed to identify three faculty members who are willing to serve on their Dissertation Committee after four years of full-time graduate study and failed to submit the Dissertation Committee Approval Form before August 1 following the end of the fourth year.
- Student has failed to complete the PhD by August at the end of seven years of full-time graduate study.
 - A one-year enrollment extension is available if circumstances warrant (consult Enrollment Extension in the Bursky School of Public Health PhD Bulletin). Under rare circumstances, students may apply for degree candidacy extended status (consult Degree Candidacy Extended in this Bulletin). Extensions are obtained by application of the student to the degree program and approved by the Doctoral Education Subcommittee.
- While on Academic Concern or Probation, student did not address the issue(s) that led to that status in the previous semester.

Students who are placed on Academic Probation will receive a letter from the program director stating the reasons and detailing the steps necessary for the student to return to good standing by the end of the probation period. These measures are designed to assist students to return to good academic standing.

Students who do not meet the criteria to be removed from Academic Probation and/or students on Academic Probation for more than one semester during their degree program (continuous or not) will have their case reviewed by the MPH or Doctoral Education Subcommittee. The subcommittees may recommend a remediation plan, continued Academic Probation, or Dismissal for Academic Reasons.

Dismissal for Academic Reasons

Academic Dismissal is distinct from withdrawal (initiated by the student), deactivation of a student's record by a failure to register, or dismissal or other sanctions associated with the University Academic and Professional Integrity Policy (doctoral students), the Academic Integrity Policy for Undergraduate and Master's Students, or the Student Conduct Code.

Dismissals are recommended by the MPH or Doctoral Education Subcommittee. Students may be dismissed immediately for extreme academic underperformance, including but not limited to failure to remediate Academic Probation or surpassing the maximum period to complete studies. Students who encounter personal situations that contribute to academic underperformance during a semester should be informed of the option to request a leave of absence rather than continuing enrollment with poor performance.

For Doctoral Students

The ability to complete mentored teaching responsibilities is not a sufficient basis for remaining enrolled.

Stipend support is discontinued at the time the student is notified of dismissal. The student is not eligible to receive stipend support during an appeal of dismissal; however, if the appeal is upheld, the student is eligible for stipend support covering the period of the dismissal appeal process. Students who have chosen to withdraw from their programs (as opposed to taking an authorized leave) cannot appeal or seek reconsideration of this decision.

Academic Progress Procedures

Students have the right to dispute their Academic Concern, Academic Probation, or Dismissal for Academic Reasons. Students considering appealing their Academic Progress decisions are welcome to consult with their advisors and/or the Associate Dean for Student Affairs. Neither the advisor nor the Associate Dean for Student Affairs make any decisions with regard to the appeal, but they can inform students about the appeal process.

Grounds for Appeal

Students may initiate an Academic Progress appeal for the following reasons:

1. A procedural irregularity that materially affected the determination.
2. New evidence that was not reasonably discoverable or available before the decision was made that could have affected the determination.
3. If a student believes that the sanction is the result of identity-based discrimination, they should make a report to the Office of Institutional Equity rather than file an appeal through this process.

Timing of Appeal

Academic Progress appeals must be initiated within 14 calendar days of the written decision by the MPH or Doctoral Education Subcommittee.

Appeals Process

- The student must appeal to the Associate Dean for Education via email within 14 calendar days of the written decision by the MPH or Doctoral Education Subcommittee.
- The appeal is limited to 400 words and should include the following:
 - Grounds for appeal, based on the criteria outlined above
 - Explanation of support for the appeal
 - **Note:** Copies of any new evidence referenced in the appeal that was not included in the original review are not included in the 400-word limit.
- The Associate Dean for Education will review the appeal, render a final decision, and provide a written response via email within 21 calendar days.

Applying for Program Completion

In order to graduate, students must meet all degree requirements and have a minimum 3.00 cumulative GPA, and all students must Apply for Program Completion in Workday prior to the anticipated degree date. Students may update their application for program completion if their anticipated degree date changes.

Deadlines for Applying for Program Completion in any given semester are set by the Office of the University Registrar.

Attendance and Preparation

Regular Class Attendance and Requirements

Graduate students are considered professionals in training. Active participation and preparation are expected of all students. Faculty members may (and often do) establish their own specific attendance, participation, and preparation requirements. Failure to meet these requirements may result in the lowering of a grade or failure in the course. Repeated unexcused absences may result in referral to the program director and the Associate Dean for Education.

1-Credit Course Attendance Requirements

Due to the condensed nature of short courses and skill labs, students should not enroll unless they can attend all class sessions. Because of the intensive and participatory nature of short courses/skill labs, student absences are extremely disruptive to the learning process.

Attendance is required. If the student misses any part greater than half a day, they will receive an F for the course. With the exceptions of death in the immediate family, severe illness, or injury, any student who is absent for one full day of class or its equivalent will receive a failing grade.

- **Adding Deadline:** Up until 5:00 pm the day before the first day of class
- **Drop Deadline:** Up until 5:00 pm the day before the first day of class
- **Withdraw Deadline ("W" grade reflected on transcript):** 11:59 pm on the first day of class

Auditing a Course

Bursky School of Public Health allows *only* authorized Visiting Scholars and Field Instructors to audit courses. Field Instructors may request to audit a course and must work with the professor to define expectations; they may not audit Intensive Trainings.

Cancellation of Classes

Whenever possible, professors will send students an e-mail or Canvas notification regarding class cancellation and make-up sessions. Especially in the event of severe weather, students are encouraged to check their e-mail and Canvas for updates on class cancellations.

Communication with Faculty, Staff, and Students

E-mail

Bursky School of Public Health relies heavily on e-mail communication. Students are expected to check their WashU E-mail daily; Bursky School of Public Health faculty and administration assume that students do so. Students who do not check their e-mail regularly run the risk of missing crucial information.

Alternate Forms of Communication

Depending on the individual faculty, staff, student, or Bursky School of Public Health office, alternate forms of communication may be used, including but not limited to WhatsApp, WeChat, GroupMe, and text messages. All forms of communication must fall under FERPA regulations and must be agreed to by all parties. This is also an opt-in process for all parties and is not required to be used by any individual member of Bursky School of Public Health.

Communicating With Faculty and Staff

Some faculty and staff members observe an "open (office) door" policy; others have posted office hours. Likewise, some make their own appointments, while others rely on an assistant. Faculty and staff can also be reached by phone or e-mail, and a complete listing is available via the WashU online directory.

Note: Some faculty and staff observe hybrid work schedules that incorporate remote work and in-office work. This may vary based on the individual, and it is highly encouraged that students reach out to the individual faculty or staff member to identify the best method of communication.

Communicating With Other Students

Student e-mail addresses are available on the WashU online directory.

Students are required to provide a local and home address, phone number, and e-mail address in Workday for administrative use, but these do not have to be displayed to the public directories. If a student wishes to restrict any information from being listed in the directories, they may adjust their settings in Workday from their student profile by clicking on "Personal" and editing information from that window. For more instructions, students can refer to the Update Personal and Contact Information in Workday Student tutorial on the Workday@WashU website.

Course Conflicts and Overlaps

Students are not permitted to take courses whose class meeting times conflict or overlap. It is the student's responsibility to make sure courses do not conflict.

Course Registration

Students register for classes on an assigned date and time via Workday after they meet with their academic advisor. For all matters pertaining to registration, timing is critical. Students should pay close attention to the pre-registration deadline for certain courses and to the online registration dates noted on the Registration Schedule of the Office of the University Registrar website.

Elective Credit for Work in Other Schools, Departments, Programs, or Institutions (MPH students only)

With pre-approval, students may take up to 9 credits of coursework outside of Bursky School of Public Health at another Washington University school or college and/or at another institution for elective credit. Students will not receive course credit if the course is not pre-approved.

Students should consult their advisor when choosing electives in order to make sure the set of electives meets the student's long-term career objectives and that courses are consistent with achieving competencies.

Work completed at another school or institution can be considered if all of the following conditions are met:

- Some courses are on an approved elective list; students should check with Bursky School of Public Health Academic Operations.
- Courses not on the approved elective list require the completion of the Elective Credit Request Form.
- The form and documentation must be submitted prior to enrolling in the course and by the semester deadline to ensure that coursework will be accepted.
 - Required documentation includes the course syllabi, which must include a detailed course description, a course bibliography, and an outline.
 - Pre-approval transfer requests must be submitted by the following deadlines to be considered:
 - Fall semester: Six weeks prior to the first day of the fall semester
 - Summer semester: Four weeks prior to the first day of the summer semester
 - Spring semester: Six weeks prior to the first day of the spring semester
- A grade of B or better is earned.
- Grades earned at other institutions will not be included in the student's WashU GPA.
- The course is offered at the graduate level and covers content and competencies that are appropriate for graduate-level public health study.
- Any course that is lower than the 5000 level needs the approval of the instructor as well as agreement on additional work required of the student to elevate the course to graduate status.
- Courses must be campus-based or taken online directly through a school or program; online courses through online educational platforms in collaboration with schools or programs are not eligible.

MPH Transfer Credits Prior to Bursky School of Public Health Enrollment

Applicants interested in receiving graduate transfer credit must notify the Bursky School of Public Health Office of Admissions & Recruitment to initiate the transfer credit evaluation process. Instructions for completing the MPH Transfer Credit Request Form will be provided.

It is the applicant's responsibility to request transfer credit evaluation by submitting the MPH Transfer Credit Request Form and all supporting documents *as early as possible* in their admissions process. Requests for credit evaluation will not be accepted after September 1 of the first term in which a student matriculates.

Incomplete submissions will not be evaluated.

Courses are evaluated in conjunction with the MPH Program Office. Applicants will be notified of evaluation results via e-mail from the Bursky School of Public Health Academic Operations Office within two or three weeks of submission.

Courses completed in a CEPH-accredited program may be evaluated for credit toward foundation-level coursework or elective requirements (maximum of 9 credit units). Practicum hours are not eligible for transfer. Courses will only be approved if content and competencies are adequately covered in the coursework completed.

Transfer credits will be reflected on the student's Bursky School of Public Health academic transcript.

Current Student Requesting Elective Credit

Before Enrolling

Students wishing to apply credit from other schools within WashU or to transfer credit taken at other institutions should be aware that credit may be granted only for graduate-level courses for which a grade of B or better has been received. Courses must have substantial content relevant to public health and competencies directly relevant to the student's concentration.

Courses must be campus-based or taken online directly through a school or program; online courses through online educational platforms in collaboration with schools or programs are not eligible for transfer credit.

Bursky School of Public Health does not grant academic credit for life or work experience.

After Completing the Course

For courses at SLU or UMSL: An official transcript for the coursework must be placed on file with the Office of the University Registrar. An official transcript is defined as one sent directly from the registrar or student records office of the university where the course was taken to the Office of the University Registrar. If the transcript does not indicate that the course was a graduate course, a statement to that effect is required from the registrar of the school offering the course.

Should a student be taking a course at another university during their final semester in their respective program and that course is required to fulfill graduation requirements, a transcript indicating a grade of B or better must be received prior to the published grade deadline for the student to be approved for graduation. Grade deadlines can be located on the Academic Calendar page of the Office of the University Registrar website.

Should an official transcript not be available until after that date, a letter on university letterhead sent directly to Bursky School of Public Health Academic Operations prior to the deadline indicating the successful completion of the course with a grade of B or better will be accepted to clear the student for graduation. This must be followed with an official transcript in order for the transfer of credit to be completed and for the credit to appear on the student's record.

Courses Taken at Other Schools Within WashU

Should a student be taking a course at another school during their final semester of their respective program, a final grade of B or better must be posted to the student's record prior to the published grade deadline for the student to be approved for graduation. Grade deadlines can be located on the Academic Calendar page of the Office of the University Registrar website.

Degree Candidates

Students may enroll in a course at another university during their final semester in the program. If that course is required to fulfill graduation requirements, then the Office of the University Registrar must receive a transcript indicating the successful completion of the course prior to the grade deadline. Adherence to this deadline allows the student to be approved for graduation. Should an official transcript not be available until after that date, a letter on university letterhead must be sent directly to the Director of Academic & Student Records indicating the successful completion of the course and received prior to the grade deadline. Once final grades are made available, an official transcript must be submitted to the Office of the University Registrar. If the student does not end up enrolling or completing the approved course, the school's registrar should be notified.

Taking Classes at Other Schools

Students at Bursky School of Public Health are assessed tuition based on enrollment caps and their prime division every semester. If a student wishes to take a course at Washington University but outside of Bursky School of Public Health and they are within their credit cap

for the semester, they may do so. If they are prime to Bursky School of Public Health, they will be assessed Bursky School of Public Health tuition, and any financial aid, including scholarships, will be applied with the following stipulations.

Graduate Course Counting Toward Graduation Requirements

Students must request that the course count toward graduation credit by submitting an Elective Credit Request through the SPH Office of Education Student Resources Hub; this request must be approved by the MPH Program.

Note: 4000-level courses in the undergraduate school may be counted as elective credit as long as the student works with the instructor to incorporate and differentiate course requirements to meet the standards of a graduate-level course.

Graduate and Undergraduate Courses Not Counting Toward Graduation Requirements

Students may take courses in other schools.

Any graduate and/or undergraduate courses taken that do not count toward degree requirements will still be included in a student's credit cap for the given semester.

Courses Not Eligible

The programs within Washington University that are *not* eligible under this policy are the Executive MBA and Professional MBA programs in Olin Business School; those offered by the Sever Institute in the McKelvey School of Engineering; and courses and programs that are part of WashU Continuing & Professional Studies (CAPS).

Tuition and Registration for WashU Courses

For graduate courses outside of Bursky School of Public Health but within Washington University in St. Louis, a student must complete the Elective Credit Form and the Inter-University Exchange Form located on the SPH Office of Education Student Resources Hub. Information about graduate courses offered at each school within Washington University can be found on the Class Schedule Search page of the Office of the University Registrar website.

Tuition for a course taken outside of Bursky School of Public Health but within Washington University is included in Bursky School of Public Health semester tuition calculations.

WashU Continuing & Professional Studies (CAPS)* and/or WashU undergraduate courses** do not count toward a student's degree requirements.

* Students will be charged additional per-credit-unit tuition for any CAPS course credits. In addition, any credits take at CAPS will not be counted toward the Bursky School of Public Health semester cap or toward full-time enrollment.

**4000-level courses can be accepted for MPH electives if the course is brought to graduate-level status with approval from the MPH Program in consultation with and with permission of the course instructor.

Inter-University Exchange Program

The following provisions apply to all coursework taken by Washington University students at Saint Louis University (SLU) or the University of Missouri–St. Louis (UMSL) through the Inter-University Exchange (IUE) program:

- Such courses can be used for the fulfillment of degree requirements or for elective credit only.
- Such courses are not regularly offered at Washington University.
- Registration for such courses requires preliminary approval of the program director, the Associate Dean for Education, and the academic department of the host university.
- Students at the host university have first priority on course enrollment (i.e., a desired course at SLU or UMSL may be fully enrolled and unable to accept Washington University students).
- Academic credit earned in such courses will be considered as resident credit, not transfer credit.
- Tuition for such courses will be paid to Washington University at the prevailing Washington University rates; this is no additional tuition cost to the student who enrolls in IUE coursework on another campus. *However, students are responsible for any and all fees charged by the other school.*
- Library privileges attendant on enrolling in a course on a host campus will be made available in the manner prescribed by the host campus.

Enrollment Instructions

WashU students must be enrolled full-time in order to participate in the IUE program and have no holds, financial or otherwise, on their academic record at WashU or at the host institution.

1. The student must complete the Inter-University Exchange Application Form, which is located on the Office of the University Registrar website.
2. The student must provide all information requested in the top portion of the form and indicate the course in which they wish to enroll.
3. The student must complete an elective credit request form.
4. The student must obtain the approval signature of the professor teaching the class (or the department chair) at SLU or UMSL, preferably in person, but it can be done via e-mail and attached with the form.

5. The student must also obtain the approval signatures from their Washington University academic advisor and their program director.
6. Completed forms must be submitted to the Office of the University Registrar in the Women's Building a minimum of one week before the start of the term.

Course enrollment is handled administratively by the university registrar's office of both the home and host institutions. Washington University students registered for IUE coursework will see these courses on their class schedule and academic record under departments SLU and UMSL.

Final grades are recorded when they are received from the host institutions. The student does not need to obtain an official transcript from SLU or UMSL to receive academic credit for IUE coursework at Washington University.

Work/Life Experience

Bursky School of Public Health does not grant academic credit for life or work experience.

Other Institutions

Once a course is approved prior to enrollment, an official transcript must be sent to the Office of the University Registrar for final credit/course satisfaction from any outside institution. A grade of B or better is required for transfer credit.

Taking coursework outside of WashU during the student's final semester is not recommended, as an official transcript may not be received by the grade deadline for graduation.

Should a student be taking a course at another university during their final semester and that course is required to fulfill graduation requirements, a transcript indicating a grade of B or better must be received prior to the published grade deadline for the student to be approved for graduation. Grade deadlines can be located on the Academic Calendar page of the Office of the University Registrar website.

Should an official transcript not be available until after that date, a letter on university letterhead sent directly to Bursky School of Public Health Records & Registration prior to the deadline indicating the successful completion of the course with a grade of B or better will be accepted to clear the student for graduation. This must be followed with an official transcript in order for the transfer of credit to be completed and for the credit to appear on the student's record.

Electronic Devices in the Classroom

Computers or other electronic devices, including "smart pens" (i.e., devices with embedded computers and digital audio recorders that record the classroom lecture/discussion and link that recording to the notes taken by the student), may be used by students at the discretion of the faculty member to support the learning activities

in the classroom. These activities include taking notes and accessing course readings under discussion. If a student wishes to use a smart pen or another electronic device to audio record lectures or class discussions, they must notify the instructor in advance of doing so. Permission to use recording devices is at the discretion of the instructor, unless this use is an accommodation approved by Disability Resources.

The nonacademic use of laptops and other devices and the use of laptops or other devices for other coursework is distracting and seriously disrupts the learning process for other people in the classroom. Neither computers nor other electronic devices are to be used in the classroom during class for nonacademic reasons or for work on other coursework. Nonacademic use includes emailing, texting, social networking, playing games, instant messaging, and using the internet. Work on other coursework may include (but is not limited to) use of the internet, writing papers, using statistical software, analyzing data, and working on quizzes or exams. The nonacademic use of cell phones during class time is prohibited, and phones should be set on silent before class begins. In the case of an emergency, the student should step out of the room to take the call. The instructor has the right to hold students accountable for meeting these expectations, and failure to do so may result in the loss of participation or attendance points, the loss of the privilege of device use in the classroom, or being asked to leave the classroom.

Enrollment Status

MPH Enrollment Status

Prime to Bursky School of Public Health

Once a student has been admitted to Bursky School of Public Health, they are considered "prime" to Bursky School of Public Health in the degree program to which they are admitted. Every admitted student is required to follow the enrollment policies as set by Bursky School of Public Health.

Students who are seeking degrees in more than one program with one program outside of Bursky School of Public Health are classified as dual degree students. Dual degree students are designated prime to a school or program depending on enrollment and the agreement of each school. Students may contact the student records office of either school for clarification.

Incoming first-year students are required to be prime to Bursky School of Public Health for their first fall and spring semesters, only taking Bursky School of Public Health courses as outlined in the degree requirements for their respective program.

Student IDs are coded to the student's prime program. Being prime to Bursky School of Public Health affords a student evening and weekend access to Bursky School of Public Health buildings. Dual degree students who are prime to another WashU program in any given semester will have their IDs coded to allow access to Bursky School of Public Health buildings.

Tuition and Scholarship Assessment

A student's prime semester designation determines how tuition and fees are assessed, as well as scholarship eligibility. Tuition and scholarship policies vary between Bursky School of Public Health and other graduate and professional schools at Washington University.

When dual degree students are prime to the MPH program at Bursky School of Public Health, they are assessed tuition and fees according to the SPH tuition structure. They are also eligible to receive MPH scholarships.

During semesters that dual degree students are prime to their Bursky School of Public Health program, they are assessed tuition according to Bursky School of Public Health's tuition and fee structure. They are also eligible to receive their scholarships from Bursky School of Public Health. During the semester(s) that dual degree students are prime to another Washington University school or to a partner university, they are assessed tuition according to the program's tuition and fee structure and are eligible to receive scholarships from the partner program. A dual degree student cannot receive scholarships from both programs in a single semester.

Academic Load Status for Financial Aid, Immigration, and Enrollment Verification

All policies as described in Washington University's Graduate Policies for Academic Load Status for Financial Aid, Immigration, and Enrollment Verification (p. 30) supersede any policies or information contained below. In summary:

Full-Time Status

Students who meet the following criteria are considered full time:

Fall and Spring Semesters

- Enrolled in 9 or more credit units of coursework, which may include practicum credits; or
- Enrolled in 3 or more credit units of practicum.

Summer Semesters

- Enrolled in 3 credit units of practicum.

International students must maintain full-time status in any semester.

Students adding another degree after matriculation will adhere to the credit enrollment caps for the new degree for the year in which they start the new degree program.

Full-time status at Bursky School of Public Health allows students to enroll in the university health insurance plan and to obtain a Metro U-Pass.

Part-Time Status

All students enrolled in the full-time program may be considered to have part-time status if they meet the following enrollment criteria:

Fall and Spring Semesters

- Enrolled in 4.5 or more but fewer than 9 credit units of coursework; or
- Enrolled in 2 or fewer credit units of practicum.

Summer Semesters

- Enrolled in 3 or more but fewer than 5.99 credit units of coursework; or
- Enrolled in 2 or fewer credit units of practicum.

If a student drops below full-time status in the fall or spring semester, the student will be ineligible for their Bursky School of Public Health scholarship until they are once again enrolled full-time.

Part-time status at Bursky School of Public Health does not allow students to enroll in university health insurance nor to obtain a Metro U-Pass and may affect financial aid and/or scholarships. **Note:** These conditions apply for any student enrolled in the full-time program who meets the part-time status requirements stated previously.

Employee and Student Status

Bursky School of Public Health defers to Washington University policy regarding employee/student status.

It is the responsibility of the employee/student to refer to their department of employment and consult with their appropriate Human Resources representatives regarding university benefits, the Employee Tuition Assistance program, and any information related to earnings and employee/student taxation, such as student FICA exemptions. Individuals should seek the counsel of an informed tax preparer or adviser regarding potential employee/student tax implications.

PhD Enrollment Status

Full-Time Enrollment

Students admitted to a PhD program in Bursky School of Public Health must maintain full-time continuous enrollment throughout the approved length of their programs. Bursky School of Public Health PhD programs are to be completed within five years under normal conditions. During those years, students will be considered full-time with one or a combination of the following enrollments:

- Registered for 9 or more course units; or
- Registered in BSDC 9900 Doctoral Research (consult the In-Absentia Enrollment information below).
 - This course indicates that the student's full-time engagement in research or academic writing and should be used once a student has completed the total credit requirement for the program.

PhD students who are not registered as above may find themselves in a part-time status and could be in jeopardy of the loss of certain benefits or be in violation of their visa status. Part-time enrollments will be permitted only in extraordinary circumstances. BSDC 9900 Doctoral Research should be used for enrollment in circumstances requiring an eighth year.

Note: Doctoral students typically maintain full-time student status over the summer, and additional registration is not required for this session. Students may enroll in courses and required practicums over the summer, if desired.

Residence Requirement

Bursky School of Public Health PhD students are required to remain in residence until they have successfully completed the area statement and qualifying exam. Bursky School of Public Health students are strongly encouraged to remain in residence through their entire time in the program, except for those students doing fieldwork to collect dissertation data. In all cases, a student receiving a fellowship must maintain full-time student status or forfeit the fellowship. Fellowship students may not accept other employment unless it has been specifically pre-approved by the program and Bursky School of Public Health.

Program Length Limit

The maximum number of semesters of continuous enrollment in a Bursky School of Public Health PhD program is 14 semesters (seven years). Students in the PhD program who have not completed their terminal degrees and who have not withdrawn will be dismissed at the end of 14 semesters. An exception may be granted by the Bursky School of Public Health Dean on request of the program director if the student is expected to complete their degree during an eighth year of enrollment. Enrollment for a ninth continuous year will not be allowed. *Semesters during which the student is on an approved Leave of Absence are not included on the enrollment clock.*

Enrollment Extension

Students may be permitted to register for one additional year beyond their seven-year program length, when approved by their program. The advisor must submit a letter to the program director explaining the rationale for the extension and specifying a timeline for completing the dissertation. The program director presents the request to the Doctoral Education Sub-Committee; a majority vote is needed for final approval of the extension. Students approved for extension must enroll in BSDC 9900 Doctoral Research, which confers full-time enrollment status. Students registered for BSDC 9900 Doctoral Research may or may not receive financial support, but they are eligible to receive other benefits available to full-time PhD students, including health insurance and wellness fee subsidies.

Degree Candidacy Extended

In very rare circumstances, Degree Candidacy Extended allows PhD candidates who have not completed degree requirements within the program length to leave the full-time program but remain degree candidates. Extended degree candidates are not registered for any courses, have no enrollment status, and receive none of the benefits available to registered Washington University students, including student loan deferment. Advisors must submit to the program director the rationale for leaving the full-time program; the Doctoral Education Sub-Committee must approve the request by a majority vote. If approved, the student may remain a doctoral candidate for up to five years. If the PhD requirements are not completed within that timeline, the candidate is immediately dismissed from the program.

In-Absentia Enrollment

During a student's period of regular registration, they may have a need or opportunity to study away from Washington University. Students, with their advisors, should submit a request for in-absentia enrollment to the program director. Directors consider requests on a case-by-case basis. If approved, the student will be registered for BSDC 9900 Doctoral Research for up to four consecutive or nonconsecutive fall and spring semesters. Semesters in which a student is registered in absentia are counted as part of the student's program length.

Grades

Letter Grades

Academic achievement at Bursky School of Public Health is measured by letter grades. Bursky School of Public Health utilizes a 4.0 GPA scale. Students pursuing a degree are graded in accordance with the following classification and point scale. A plus (+) or minus (-) sign after a grade indicates a greater or lesser degree of the assigned grade based on the merit of the work. Bursky School of Public Health does not grant letter grades of A+ or D.

Grade	Meaning	Points per Unit
A		4.0
A-		3.7
B+		3.3
B		3.0
B-		2.7
C+		2.3
C		2.0
C-		1.7
D	Bursky School of Public Health does not assign this letter grade for any course.	
F	Failing work merits no credit and will not count toward the fulfillment of the degree requirement.	0.0

R	Course has been retaken and student has earned a different grade. Holds no GPA value.
HP#, HP	High Passing grade for Practicum and Capstone II.
P#, P	Passing Grade for Practicum and Capstone II.
LP#, LP	Low Pass, designated only for Practicum.
N	No grade; interim placeholder. Must be replaced with a grade in order to receive credit.
I	Incomplete; interim placeholder. Must be replaced with a grade. Consult the Incomplete Grade Policy.
W	Withdraw. Holds no GPA value.

Grading Scale

MPH Grading Scale

The MPH Program does not have a standard grading scale. Each instructor has the ability to determine the grading scale that is deemed appropriate for each course they teach. It is the instructor's responsibility to publish the grading scale for each course in the course syllabus. It is students' responsibility to refer to the grading scale published in the syllabus of each course.

PhD Grading Scale

Credit-conferring grades for PhD students are as follows: A, Outstanding; B, Good; and C, Conditional (an A, B, or C grade may be modified by a plus or minus). Other grades are F, Failing; P, Pass; I, Incomplete; W, Withdrawal; R, Repeat; and N, No grade submitted. The mark of I reverts to an F grade after the lapse of one calendar year.

Minimum GPA Requirement

All degree programs at Bursky School of Public Health require that students maintain a minimum cumulative GPA of 3.0 (on a 4.0 scale). The first semester that a student fails to meet the minimum 3.0 cumulative GPA, they will automatically be placed on Academic Probation for the next semester. If the student is only enrolled in practicum credit (Pass/No Pass) for the next semester, then the student's grades will be reviewed the following semester, when grades are earned. Students will be notified by a representative of the MPH program regarding Academic Probation.

There may be financial aid implications for a student placed on Academic Probation. Students should discuss their options with the manager of Student Financial Services.

A student on Academic Probation for more than one semester will have their case reviewed by the MPH program. Consult the Academic Progress section for more information.

GPA Requirements to Maintain Scholarships/Financial Aid

Bursky School of Public Health Scholarships

If a student drops below full-time status in the fall or spring semester, the student will be ineligible for their Bursky School of Public Health scholarship until they are once again enrolled full-time.

Students who have been given scholarships must maintain a GPA of 3.0 each semester, fulfill any additional eligibility requirements, and enroll full time in the fall and spring semesters. Failure to meet a 3.0 GPA requirement after each semester places the scholarship at risk.

If a student fails to meet the GPA requirement, they will receive a one-semester probation period. During the semester of probation, the student will continue to receive scholarship funds. If the student fails to meet the GPA requirement at the end of the probation semester, the scholarship may be rescinded. The program director will do a holistic review of the student's progress and, in consultation with the manager of Student Financial Services, may approve the continuation of scholarships after a second semester below a 3.0 cumulative GPA based on demonstrated academic improvement.

Once a student attains the required 3.0 cumulative GPA, their scholarship will be reinstated.

Satisfactory Academic Progress for Federal Financial Aid Eligibility

Consult the Bursky School of Public Health Financial Information page (p. 125) for details on Satisfactory Academic Progress for Federal Financial Aid eligibility.

Grade Appeals

Students have the right to dispute course grades (not individual assignments) if they believe such grades do not accurately reflect the quality of their work. Students considering appealing their grades are welcome to consult with their advisors and/or the Associate Dean for Student Affairs. Neither the advisor nor the Associate Dean for Student Affairs makes any decisions with regard to the appeal, but they can inform students about the appeals process.

Grounds for Appeal

Students may initiate grade change requests for the following reasons:

- Clerical or mathematical errors;
- Inequitable use of the syllabus' grading rubric or policies; or
- Grading impacted by issues beyond the course content.

Students should be aware that an appeal may include a complete review of a student's work in the course as a whole, which may result in a grade being either raised or lowered.

Students may not appeal to raise their grades by completing additional assignments (i.e., “extra credit”) or by submitting late work, except in the case of an official Incomplete.

If a student believes that the grade is the result of identity-based discrimination, they should make a report to the Office of Institutional Equity rather than file a grade appeal through this process. In addition, grades that are a result of sanctions for a violation of academic integrity are not eligible for appeal through this process.

Timing of Appeal

Grade appeals must be initiated within 30 calendar days of the grade being posted.

Grade appeals in the semester prior to the student's graduation must be raised immediately and addressed on an expedited timeline so that the appeal may be resolved prior to the conferral of a degree and the sealing of the student's transcript. A grade appeal submitted after a student graduates will not be reviewed, as grade changes cannot be made following degree conferral.

Appeals Process

- The student must first appeal the grade with the instructor within 30 calendar days of the grade being posted. The appeal must be emailed to the instructor, reference the grade appeal policy, and outline the reasons for the appeal.
- The instructor must reply to the student via email within 14 calendar days of the student's request, providing detailed justification for retaining the assigned grade or confirming that the grade will be changed in light of the student's appeal.
- If the student's written concerns have not been met by the instructor's justifications, the student may raise the grade appeal to the program director within 14 calendar days of receiving the instructor's written justification. The student will email a written appeal to the program director, describing the student's wish to appeal the failing grade.
- The appeal is limited to 400 words and should include the following:
 - Grounds for appeal, based on the criteria outlined above;
 - Explanation of support for the appeal; and
 - Copies of any new evidence referenced in the appeal that was not included in the original review (this is not included in the 400-word limit).

The program director will review the appeal, render a final decision, and provide a written response via email within 21 calendar days. If a conflict of interest exists between the student and the program director (e.g., the program director is the instructor of record), the case will be referred to another program director in Bursky School of Public Health.

Grade Assignment for Withdrawals

If a student withdraws from any program or course after a semester's Add/Drop deadline, a Withdraw (W) is recorded on their transcript.

Incomplete Grades

Incomplete Course Grade Policy

An interim placeholder of I, for Incomplete, is used by an instructor when a student experiences an extenuating circumstance preventing completion of the course requirements by the conclusion of the semester.

Incomplete Request Procedure

Students must first discuss an Incomplete grade with the relevant faculty member.

- If an Incomplete grade is agreed-upon, the faculty member will submit an I grade for that semester.

Timeline for Satisfying Course Requirements

Students have 60 days from when semester grades are due or until the date the instructor sets (whichever comes first) to complete any outstanding work and submit it to the instructor.

At the 60-day (or instructor-set) deadline, whatever work is completed will be graded, and any work not submitted will receive a 0. Based on this, an appropriate grade will be assigned with full acknowledgment that the final grade may be an F.

- *Example:* A student does not turn in a homework assignment worth 5% of the grade but does turn in a missing paper worth 50% of the grade. The student will receive a 0 grade for the homework assignment, an appropriate grade for the paper, and a final grade that reflects these assignments, other course assignments, and other course requirements overall.

Incompletes and Restricted Registration/Enrollment

Students cannot enroll in a class if the prerequisite is incomplete.

Students with two or more Incomplete grades and who are enrolled in practicum are required to be on a Practicum Support Plan in collaboration with their Field Faculty Advisor. In addition, students are only allowed to be enrolled in 1 credit of practicum until at least one of the Incomplete grades is satisfied.

Students cannot start a new semester with 7 credits or more of Incomplete grades. The deadline to clear and be below 7 credits of Incompletes is 11:59 p.m. on the Friday of the first week of the new semester.

- If the number of Incompletes does not fall below 7 credits by the deadline, the Office of the University Registrar will withdraw the student from *all semester courses*.

Students with Incompletes who are scheduled to go on personal or medical Leaves of Absence (LOAs) must have their grades posted prior to the first date of leave. Whatever work is completed will be graded, and any work not submitted will receive a 0. Based on this, an appropriate grade will be assigned with full acknowledgment that the final grade may be an F.

- Students are encouraged to have their LOAs officially start on the first day of the subsequent semester so that they can take the time in between the two terms to complete as much outstanding work as possible, prior to losing access to WashU systems.

Note: Barring any extenuating circumstances, students who take LOAs prior to the completion of the semester will be withdrawn from all classes and will need to retake said classes upon return to the university.

Incomplete Practicum Grade Policy

An interim placeholder of No Grade (N) is assigned by the system for a semester in which a student has not completed all practicum requirements and/or the following practicum-related documentation:

- Student Self-Evaluation of Competencies and Performance (accessible in Canvas)
- Student Assessment of Practicum Experience (accessible in Canvas)
- Field Instructor Evaluation of Practicum (to be sent to the Field Instructor upon completion of the Student Self-Evaluation)
- Practicum Timesheet (accessible in Canvas; this document requires student and Field Instructor signatures)
- Portfolio Product Cover Page (accessible in Canvas; this document requires student and Field Instructor signatures)

If a student is completing practicum credits at the same organization for more than one semester, the N grade will stand until the end of that experience and until all documentation is completed. A grade will then be assigned for all semesters.

If an interim placeholder of N has been assigned, it is the student's responsibility to ensure the completion of all registered practicum hours and the submission of all practicum-related documentation to the Office of Student Applied Practice Experience by the following deadlines:

- *Practicum credits registered for fall semester:* May 1 of the current academic year
- *Practicum credits registered for spring semester:* August 1 of the current year
- *Practicum credits registered for summer semester:* December 1 of the subsequent academic year

If a student has not met the required semester deadlines to replace the N, the Bursky School of Public Health Registrar's Office will assign an F for the registered practicum credits. Final practicum grades are HP# (High Pass), P# (Pass), or F# (Fail).

If the grade is F#, the student must re-register and pay for the required practicum credits. No credit for previously accrued practicum hours will be counted. Students cannot graduate with an incomplete on their record.

Pass/No Pass Option

Few courses offered in Bursky School of Public Health are strictly Pass/No Pass or Credit/No Credit, and students are not permitted to choose whether to take a course Pass/No Pass. The only courses offered as Pass/No Pass are Practicum and Capstone II.

Courses taken outside of Bursky School of Public Health that are approved to count toward a degree must be taken for credit/a letter grade.

Repeating a Course

MPH Course Retake Policy

Students who have failed a course have the opportunity to repeat it, in accordance with these stipulations:

- There must be space in the course.
- Courses taken at Bursky School of Public Health may only be repeated at Bursky School of Public Health.
- This option may only be applied a maximum of one time for the same course. If the student takes a course and receives a failing grade, the student will be withdrawn from the program.
- Students must register for the same course number, although the instructor for the course may be different. If a course is no longer offered, students may not substitute an alternative course.
- Tuition will be assessed for the repeat course.
- The original course will remain on the transcript and be designated with an *R* next to the original grade, indicating that the course was repeated.
- All courses designated with an *R* (repeat note) will not be included in grade point average calculations and are not applicable toward graduation requirements.
- The letter grade earned in the most recent attempt will be included in the cumulative credit total, and a new grade point average will be calculated.
- A course taken for undergraduate credit may not later be changed to graduate credit. (*Washington University undergraduate students only*)
- Courses taken for credit toward an undergraduate degree may not be retaken for graduate credit. (*Washington University undergraduate students only*)
- If a student repeats a course after their degree has been awarded, the original course grade will not be excluded from the degree GPA.
- Students who have been dropped from a degree program may not use the course repeat process to gain readmission to that degree program.

Students who would like to repeat a course for a reason other than receiving a failing grade may do so, under the following circumstances:

- There must be space in the course.
- The course will not count toward credits earned for degree completion.
- Tuition will be assessed for the course. The course will incur a per-credit-unit tuition charge in addition to the per-semester tuition charge.
- The course grade for the repeat course will not replace the first attempt course grade in the student's GPA. Both course attempts will appear on the student's transcript.

PhD Course Retake Policy

Bursky School of Public Health doctoral students may choose to retake a course with the permission of their advisor. If a course is repeated, only the second grade is included in the calculation of the GPA. Both enrollments and grades are shown on the student's official transcript. The symbol R next to the first enrollment's grade indicates that the course was later retaken. Credit toward the degree is allowed for the latest enrollment only. No student may use the retake option to replace a grade received as a sanction for violation of the Academic Integrity Policy. The R option may be invoked only once per course, and the original grade option must be retained.

Grievance Procedures

From time to time, students may have concerns regarding a peer, faculty, or staff member's conduct within or beyond the classroom. It is important that students, faculty, and staff have a common understanding of how such concerns may be expressed.

Addressing Concerns to an Individual

Some concerns students have regarding interactions with peers or faculty, classroom conduct, or meetings with staff result from poor communication or misperceptions of interactions. Many such problems can best be resolved through discussion between the involved individuals. If a student has a concern and they feel comfortable, they should contact the involved student, faculty member, or staff member as quickly as possible to request a meeting to respectfully discuss the matter. Everyone should be willing to listen to legitimate concerns and to rectify the problems.

Students may choose to consult with another faculty or staff member for advice prior to any conversation.

Addressing Concerns to Administration

Some concerns may not be appropriate for discussion or may not be resolved with the individual student, faculty member, or staff member; they may be related to larger, systemic issues. When a student would like to report a concern or file a complaint within Bursky

School of Public Health, every attempt should be made to adhere to the following order of communication to resolve the issue. Only after unsatisfactory progress has been made should a student move to the next level of communication.

1. Program director or Associate Dean for Student Affairs
2. MPH or PhD Education Subcommittee
3. Associate Dean of Education

Students may also report concerns through the following processes:

- Midterm and Final Course Evaluations
- Exit Survey given at the time of graduation
- Town Halls
- Annual School Survey

In addition, students may consult WashU Reporting Options for various concerns, including the Student Feedback & Complain Form (with the option to submit anonymously), the Student Conduct Incident Report Form, the Bias Report & Support System, Gender Equity and Title IX resources, and many more.

Graduate students may also seek assistance from the Offices of the Ombuds. Ombuds serve as confidential, independent, and impartial resources offering assistance with the informal resolution of university-related conflicts and advocating for fair treatment and processes.

Washington University policies state that members of the university community can expect to be free from discrimination and harassment. Students, faculty, staff, and outside organizations working on campus are required to abide by specific policies prohibiting harassment. An allegation of discrimination or harassment may be appealed to the Vice Chancellor for Human Resources, who will determine whether to convene the Title IX Grievance Committee to hear the case. Visit the Discrimination and Harassment page of the WashU Policies website for more information.

Student concerns are taken seriously by the administration. In no circumstances will retaliatory actions against a student for submitting such a concern be tolerated. Once a concern is received, an administrator will review it and determine whether it should be referred to another administrator or department. If the student submitting the concerns has identified themselves and indicates a wish to meet to discuss further, an administrator will contact the student to discuss the matter further, discuss the student's formal and informal options to address the concern, and, if appropriate, refer the student to additional resources.

Holds

Washington University and Bursky School of Public Health can place a hold on a student's record for various reasons. If a student has a hold on their record, they will not be allowed to register for classes in the following semester, order a transcript, or use Bear Bucks. Holds should be cleared with the department that placed it (e.g., Student Financial Services will remove a hold they placed for a late payment that has been received).

The Office of the University Registrar places holds on the records of students who do not enter their current address (both home and local) and telephone information.

Bursky School of Public Health Academic Operations places holds on the records of students for neglecting and/or being delinquent in completing the following requirements:

- Having more than 6 credits units marked with Incomplete (I) grades;
- Declaring a concentration; and
- Completing the human biology prerequisite.

Other university holds may include past due balances, parking tickets, student conduct, not completing required university processes (e.g., immunizations, Title IX training), and other issues.

Students can find specific details about any holds on their account within Workday.

Independent Study

Bursky School of Public Health allows for independent study credits to be earned in accordance with the following policies.

The purpose of an independent study is to enable a student to gain in-depth knowledge of an area germane to that student's course of study but that is not offered in a course in Bursky School of Public Health. The need for and value of an independent study will be evaluated very carefully to determine whether an independent study is justified. The student and their supervising full-time Bursky School of Public Health faculty member will arrange objectives for the content of each independent study. All independent studies should result in a tangible output as a basis for evaluation (e.g., a notebook, a paper, an online or media presentation).

- Independent study can only be applied toward the fulfillment of elective credit requirements.
- Independent study must be taken for a letter grade.
- Only full-time faculty are eligible to serve as the faculty of record/independent study supervisor/liaison for an independent study.
- Students must have a cumulative GPA of 3.0 or higher in their graduate program and must have completed a minimum of five courses in Bursky School of Public Health to undertake an independent study.
- No more than 6 independent study credits may be applied toward satisfying elective credit degree requirements in Bursky School of Public Health.
- No more than 3 credits of independent study may be taken in a single semester.
- 1 credit unit is equal to 15 hours of contact between the student and the faculty member.
- No more than two students may work on the same independent study simultaneously, and there must be a clear delineation of tasks.

- The content of an independent study course and the reason for requesting it must be detailed in an independent study proposal developed by the student and the instructor, who must be a full-time graduate faculty member.
- The instructor who will direct the independent study must pre-approve the proposal before the the proposal is submitted to the Director of Academic & Student Records for approval by the program director via the SPH Office of Education Student Resources Hub.
- The scope, rigor, and intellectual demands of an independent study proposal must equal or exceed those of regular graduate courses offered by Bursky School of Public Health.
- A student may not audit or sit in on a course to receive independent study credit.
- Independent studies may not be completed retroactively. In other words, the agreement for an independent study is to be completed, signed, and approved by all parties prior to the initiation of the project and no later than the semester's Add/Drop deadline.
- Independent studies adhere to the Add/Drop deadline of full semester courses. Students may not add or drop an independent study course after these posted deadlines.

Prerequisite Policies

MPH students must demonstrate the completion of a college-level human biology course with a grade of B or higher. This requirement may be satisfied by coursework completed prior to admission to WashU; this needs to be confirmed by the Bursky School of Public Health Office of Admissions and Recruitment.

If the human biology course is not completed prior to matriculation, MPH students must fulfill this prerequisite by the end of their first spring semester as follows:

- Enroll in and complete a campus-based or approved online human biology course prior to the end of the first spring semester. The Bursky School of Public Health Office of Admissions & Recruitment keeps a listing of approved courses (available upon request). Students must earn a grade of B or better in the course and have the official transcript sent to the Bursky School of Public Health Office of Academic Operations to remove the deficiency.

Until this requirement is met, an academic hold will be placed on the student's account by the Director of Academic & Student Records. Students should contact the Office of Admissions and Recruitment and/or their Academic Advisor about this prerequisite.

Time Away: Leave of Absence, Withdrawal, and Reinstatement Process

Consult the Time Away: Leave of Absence, Withdrawal and Reinstatement Process page of the Office of the University Registrar website for more information.

Personal Leave of Absence

Personal leave* is used for any nonmedical emergency (e.g., pregnancy, death in the family).

Students must submit the leave of absence request prior to the final day of the semester in which they are requesting the Leave of Absence (LOA). Bursky School of Public Health does not approve LOA paperwork submitted after the last day of classes of the semester.

A personal LOA can be approved for up to one academic year.

A student who anticipates being on leave in any semester should discuss their situation with their academic advisor to consider all options and assess the potential consequences to their academic record. The timing of an LOA may impact both academic credits and tuition charges. Before taking an LOA, students should meet with the Director of Student Financial Services to discuss how taking a leave may affect their record.

A student who takes a personal LOA after the twelfth week of classes may have to take the subsequent semester off, which can include the summer semester.

Depending on the length of leave and the structure of the current curriculum, previous credits may not count toward the degree. If, due to an extended LOA, a student cannot complete their degree within four years of the initial matriculation date of their program, the student must reapply for admission and may be required to retake courses and/or practicum hours.

Students should contact their Academic Advisor for guidance and support.

* International students requesting a personal LOA must leave the country within 15 days after submitting their request and are responsible for their visas. They must also meet with a staff member in the Office for International Students and Scholars.

Medical Leave of Absence

Review the Medical Leave of Absence page of the WashU Cares website for more information. Please contact WashU Cares for guidance and support.

Military Leave of Absence

Review the Policy on Military Absences, Refunds and Readmissions for more information. Please contact the Office of Military & Veteran Services for guidance and support.

Involuntary Leave Policy

The Washington University Involuntary Leave Policy (p. 18) applies to all undergraduate and graduate students.

Voluntary Withdrawal

A student may request a voluntary withdrawal if they no longer wish to pursue their degree at Bursky School of Public Health. Dual degree students may also voluntarily withdraw from one or both of their Bursky School of Public Health programs if they no longer wish to pursue their degree.

Before consideration of a voluntary withdrawal from Bursky School of Public Health, a student should consult with their academic or faculty advisor to consider all options and assess consequences to their academic record. The timing of the withdrawal may impact both academic credits and tuition charges.

Administrative Withdrawal

In any semester, a student who has not enrolled for fall or spring courses or who has not attended classes by the Add/Drop deadline for which they are enrolled and who has not initiated an LOA or a voluntary withdrawal will be administratively withdrawn from Bursky School of Public Health at the end of the fourth week of the current semester.

Termination

A student may be terminated from Bursky School of Public Health for the following reasons:

- Failing to meet or maintain satisfactory academic progress;
- Exhibiting behavior in violation of the current Public Health Code of Ethics; or
- Violating university and/or school policies and procedures, including but not limited to standards of professionalism, academic integrity, and student conduct.

The MPH or PhD Education Subcommittees may be convened to address issues of concern regarding a student's capacity or appropriateness for public health study or practice.

Readmission and Reinstatement

Students requesting a return to Bursky School of Public Health must first contact Bursky School of Public Health Academic Operations for an audit of their academic record. Academic Operations will inform the student whether they must complete an application for Readmission or Reinstatement, as defined below:

Readmission: Student Must Reapply Through the Office of Admissions and Recruitment

- *Academic dismissal:* Students who have been dismissed for academic reasons by Bursky School of Public Health
- *Inability to complete program within required time frame:* Students who completed some Bursky School of Public Health coursework but left the program for a period of time and cannot complete their degree within four years from their initial date of matriculation into the program

Reinstatement: Student Must Complete a Request for Reinstatement With the Office of the University Registrar

- *Administrative financial withdrawal:* Students who have been administratively withdrawn from Bursky School of Public Health due to failure to pay tuition and/or fees or who have another outstanding balance on their account
- *Administrative withdrawal (nonfinancial):* Students who miss one semester of registration (excluding summer; these students will be discontinued and administratively withdrawn from their programs)
- *Personal LOA:* Students who elect to temporarily interrupt their progress toward their degree for a personal, nonmedical reason
- *Medical LOA (requires additional approval from WashU Cares):* Students who, voluntarily or involuntarily, must temporarily interrupt their progress toward their degree due to a physical or mental health need

Decisions regarding reinstatement or readmission may be based on the applicant's academic status when last enrolled, activities while away from campus, length of absence, the potential for successful completion of the program as determined by Bursky School of Public Health, the ability of the department to support the applicant both academically and financially, as well as other relevant factors or considerations.

Voluntary Withdrawal

This information applies to students who elect to voluntarily withdraw from Bursky School of Public Health and discontinue their program of study. Students with accounting holds must clear their balance with Student Accounting before any application for readmission or reinstatement is considered. Credits for previous Bursky School of Public Health coursework taken prior to a student's return are not automatically counted and must be reviewed by the Office of Admissions and the Bursky School of Public Health Registrar. Bursky School of Public Health coursework completed more than 6 years prior to reinstatement or readmission will not be considered for credit toward the degree.

Decisions regarding reinstatement or readmission may be based on the applicant's academic status when last enrolled, activities while away from campus, length of absence, the potential for successful completion of the program as determined by Bursky School of Public Health, the ability of the department to support the applicant both academically and financially, as well as other relevant factors or considerations. Due to enrollment limitations, there is no guarantee of approval for reinstatement or readmission.

Doctoral students who do not register in one of the scenarios as described under the Full-Time Enrollment Policy may have to apply for reinstatement if they wish to re-enroll at a future time.

Application Deadlines for Readmission or Reinstatement

Readmission

Students must adhere to the dates and deadlines that are set by the Office of Admissions & Recruitment.

Reinstatement

A completed Application for Reinstatement must be received by the Bursky School of Public Health Office of the Registrar *6 weeks prior to the first day* of the term in which enrollment is requested. After this date, the application will be reviewed for reinstatement in the subsequent term. Once the application has been reviewed and a decision has been made, the student will receive a notification via e-mail.

Reinstatement After a Medical LOA

Review the Preparing for Return From MLOA page of the WashU Cares website for more information. Please contact WashU Cares for guidance and support.

Degree Requirements for Students Approved to Return to Bursky School of Public Health

Students Approved for Readmission

- The student is responsible for completing the Bursky School of Public Health degree requirements that are in effect at the time of their new matriculation semester.

Students Approved for Reinstatement

- Within the first 2 weeks of the semester in which the student returns from an LOA, the student is required to meet with their Academic Advisor to create an academic success plan for the remainder of their program.
- The student must be able to complete their degree requirements within four years of the original date of matriculation.
- The student must complete the degree requirements outlined in the Bursky School of Public Health Handbook from their original matriculation semester.
- At the discretion of the program, if course offerings have changed as a result of revised degree requirements, finishing the degree program may require the completion of additional courses, exams, and/or prerequisites or corequisites.

Scholarships/Tuition

Scholarships/Tuition for Readmission

- Students approved for readmission are no longer eligible to receive scholarships previously awarded by Bursky School of Public Health.
- Students will be reconsidered for merit-based scholarship by the Office of Admissions & Recruitment in the same manner as students applying to Bursky School of Public Health for the first time.
- Students should contact the Director of Student Financial Services regarding reapplying for federal student aid.
- Students will be assessed tuition and fees according to the current tuition rate/structure in effect for the academic year in which they return to Bursky School of Public Health.

Scholarships/Tuition for Reinstatement

- Students approved for reinstatement will receive any remaining funds from the scholarship awards offered when they were first admitted to their programs.
- Students will be assessed tuition and fees according to the current tuition rate/structure in effect for the academic year in which they return to Bursky School of Public Health.

Transfer Credit

MPH Transfer Credit Policy

With preapproval, students may take up to 9 credits of coursework outside of Bursky School of Public Health at another Washington University school or college and/or at another institution for elective credit. Students will not receive course credit if the course is not preapproved. Consult the Elective Credit for Work in Other Schools, Departments, Programs, or Institutions (MPH students only) section for more information. Approval will not be granted to take a course at another institution when the course is being offered by Bursky Public Health during that same academic semester.

PhD Transfer Credit Policy

A maximum of 21 credits earned at institutions other than Washington University may be applied toward the PhD degree. Transfer credit must be recommended by the program director and approved by the registrar with receipt of an official transcript. No graduate courses carrying grades lower than B can be accepted for transfer toward any graduate degree.

Financial Information

Tuition and Fee Charges

Tuition for the 2026-27 school year at the Bursky School of Public Health is set at \$45,000. Moreover, students can expect to pay additional fees that cover various services to support their academic and personal well-being. These fees provide access to a wide range of student activities, health and wellness services, technology, and insurance, when applicable.

- *Activity and service fee:* \$140.00
- *WashU health and wellness fee:* \$700.00
- *WashU student health insurance fee:* \$2,923.00*

* All Washington University, students are required to carry health insurance. Full-time graduate students on the Danforth Campus are automatically enrolled in (and billed for) the basic student health insurance plan unless proof of comparable coverage is provided by domestic students. International students are not eligible to waive out of the insurance plan. For details about available plans or waiving options, visit Student Health Services. (Health insurance fees are pending state approval and are subject to change.)

Cost of Attendance

The cost of attendance is a value calculated by the university, and it estimates a student's total cost to attend school in a specific academic program for an academic year. The cost of attendance includes mandatory tuition and fees plus estimated costs for living expenses. Health insurance is not included in these estimates, but it is required for all students. The estimated cost of attendance is revised annually and is meant to be used as a guide for students to make informed financial decisions regarding their enrollment.

Master of Public Health Costs

- *Enrollment Deposit*: \$300 upon enrollment (this deposit will go toward tuition for the first semester)
- *Tuition/fees*: \$45,000.00
- *Mandatory fees*: \$812.00
- *Estimated costs*: \$27,900.00
- *Total estimated cost*: \$74,012

2026-27 Estimated Costs Breakdown (included in Cost of Attendance)

- *Housing and food* (room, board, groceries): \$19,000
- *Books/supplies* (reading materials, laptop, etc): \$1,800
- *Transportation* (gas, ride services, car repairs): \$1,700
- *Professional costs* (practicum, CPH exam, etc): \$1,000
- *Personal and miscellaneous expenses*: \$4,400
- *Total*: \$27,900.00

If eligible, domestic students may borrow up to the cost of attendance in federal student loans; however, decreasing personal/living expenses and securing other funding sources can reduce the amount a student may need to borrow. Students typically fund their degree through a combination of sources that may include institutional funding (Bursky School of Public Health scholarships awarded at admission), external scholarships, part-time employment, personal savings, family or sponsor support, military or employer benefits, and federal student aid.

PhD Costs

All Public Health Sciences students admitted into the Bursky School of Public Health's doctoral program receive a financial package that consists of tuition coverage and five years of stipend support.

Students are encouraged to apply for additional funding opportunities in the form of research and teaching fellowships as well as dissertation grants. Fellowship opportunities may occur as early as the first semester of satisfactory academic progress.

Our programs are full-time, and students are expected to be physically present through the first few years of the program.

Refunds

Withdrawal From All Courses: Fall and Spring Full-Semester Courses

In order to qualify for any tuition refund as listed below, courses must be dropped before 11:59 p.m. on Friday of the week indicated. This policy applies only to students who withdraw (or take a leave of absence) from all semester courses.

- 100% tuition refund for courses dropped before the end of second week
- 70% tuition refund for courses dropped before the end of fourth week
- 50% tuition refund for courses dropped before the end of eighth week

Courses dropped after the end of eighth week will receive no tuition refund.

Withdrawal From All Courses: Summer

In order to qualify for any tuition refunds, students must follow the below deadlines:

- 100% tuition refund for courses dropped by midnight before the course begins
- 80% tuition refund for courses dropped by midnight of the first day of the course

There will be no tuition refunds for courses dropped after midnight on the first day of the course.

Withdrawal From Individual Courses

- For students who withdraw from one or more courses but remain enrolled in the minimum number of credits required for full-time enrollment, there is no tuition adjustment/refund.
- The SPH Offices of the Registrar and Financial Aid will inform students about any financial aid and scholarship implications if their enrollment falls to less than full time.

Federal Financial Aid

The Department of Education (DOE) requires students to meet Satisfactory Academic Progress (SAP) standards in order to receive federal financial aid (loans and Work-Study). To maintain SAP, students must maintain the minimum requirements for cumulative GPA and pace. Students must also complete their degree within the maximum time frame allowed for the program, as defined below:



- The DOE SAP cumulative GPA requirement is 3.0 for a fall or spring semester. Summer semesters are not included.
- The pace requirement for maintaining SAP requires students to earn credit for at least 67% of the credits attempted. *Pace* is defined as the number of credits earned divided by the number of credits attempted.

If a student does not meet either the semester DOE GPA requirement or the pace requirement, federal financial aid is cancelled for the following semester. An appeal may be submitted to the manager of student financial services and must include the following:

- An explanation of why the SAP requirements were not achieved
- How the student's situation has changed in order to achieve SAP requirements in the following semester

Students will be notified by the manager of Student Financial Services regarding the decision on the appeal within two weeks of the appeal submission.

Postdoctoral Training

Postdoctoral appointments at WashU are full-time academic positions focused on mentored research and professional development under the guidance of faculty mentors. They are supported through research grants, individual fellowships, or institutional training programs. Their primary purpose is to help highly trained individuals acquire the professional skills needed for their chosen career path.

Because of this focus, postdoctoral appointments are inherently time-limited; they are capped at five years including any experience at other institutions following the doctoral degree. All postdoctoral appointees are eligible for university-sponsored benefits, and the postdoctoral experience is regulated by postdoc-specific policies and institutional normative.

WashU is proud to be an institutional member of the National Postdoctoral Association, which reflects our commitment to excellence in postdoctoral education.

Postdoc Categories

At WashU, there are two categories of postdocs:

1. *Postdoctoral Research Scholars* receive external funding in the form of a stipend and are considered non-employees.
2. *Postdoctoral Research Associates* receive a salary from the university and are considered employees.

Office of Postdoctoral Affairs

The Office of Postdoctoral Affairs (OPA), under the Office of the Vice Chancellor for Research, serves postdoctoral research associates and scholars across both the Danforth and Medical campuses. The OPA provides comprehensive resources to help postdocs achieve their career and professional development goals, advocates for postdoctoral issues, and offers guidance on recruitment and postdoctoral life. It also fosters a vibrant and inclusive postdoctoral community through networking, social events, and peer support.

The OPA postdoc curriculum includes signature programs in the following areas:

- *A career development series* to equip postdocs with essential skills for navigating diverse career pathways and achieving success in both academic and industry settings;
- *Leadership and communication training* to advance leadership capabilities while strengthening grant writing, publishing, and science communication skills;
- *Wellness and community engagement* that promotes holistic development, well-being, and meaningful integration into the WashU community;

- *Fellowships and awards* that recognize excellence and provide competitive opportunities for research and professional growth; and
- *An annual postdoc symposium and research seminars* that showcase innovative research and foster interdisciplinary collaboration across campuses.

Postdoc Organizations

The OPA supports recognized postdoc-led groups, including three major organizations:

1. WashU Postdoc Society (WUPS)
2. WashU Black Postdoctoral Association
3. Postdoc Peer Mentoring Program

Additional Information

For more information about programs, resources, and upcoming events, visit the OPA website.

Cross-School Interdisciplinary PhD Programs

There are certain graduate programs that span more than one school at Washington University. Please visit the following pages to learn more about these programs:

- Division of Biology & Biomedical Sciences (p. 129)
- Division of Computational & Data Sciences (p. 142)
- Institute of Materials Science & Engineering (p. 145)

Division of Biology & Biomedical Sciences

The Roy and Diana Vagelos Division of Biology & Biomedical Sciences at Washington University offers exceptional doctoral education at one of the nation's preeminent biomedical research centers. The Division includes 11 doctoral programs:

- Biochemistry, Biophysics, & Structural Biology
- Biomedical Informatics & Data Science
- Cancer Biology
- Computational & Systems Biology
- Developmental, Regenerative, & Stem Cell Biology
- Immunology
- Molecular Cell Biology
- Molecular Genetics & Genomics
- Molecular Microbiology & Microbial Pathogenesis
- Neurosciences
- Plant & Microbial Biosciences

A collaborative, interdisciplinary approach to research and education is a hallmark of Washington University and the Division. As a university-wide consortium, the Division transcends departmental lines and removes traditional boundaries of scientific fields. Faculty and graduate students regularly cross disciplines, devising novel questions and approaches that might otherwise go unexplored. The Division consists of over 700 PhD and MD/PhD students, with more than 700 faculty members from 39 departments.

Washington University in St. Louis provides unique opportunities for translating basic science into practical application. In addition, the Division's associations with internationally prominent local institutions provide exciting opportunities. Students in the biomedical sciences enrich their work with the clinical perspective of our outstanding

medical school; students also benefit from our close affiliation with the internationally renowned Missouri Botanical Garden, as well as the Saint Louis Zoo, the Tyson Research Center, the National Great Rivers Research & Education Center, and the Donald Danforth Plant Science Center.

To help prepare graduates for careers in academia, government, industry or another field of their choice, educational opportunities are offered for skill development and career exploration. The Division offers a career-planning curriculum where students can pursue noncredit elective credentials to build transferable professional skills in four areas that apply to a wide variety of scientific careers: leadership, entrepreneurship, science communication, and teaching. Through the Next Generation of Science Scholars, students are provided networking and community-building events, professional development seminars, and scientific community outreach opportunities. Professionals from a variety of fields (e.g., biotech startups, patent law) provide presentations and Q&A sessions to students throughout the year. In addition, the DBBS holds partnerships with groups such as the Center for Teaching and Learning, the Center for Career Engagement, and student organizations such as ProSPER, InPrint, the Balsa Group, and the Young Scientist Program. Students have multiple opportunities to develop experiences relevant to their future career goals.

DBBS students can reference the DBBS Student Handbook for student guidelines across all Division programs.

Email: DBBS-Info@email.wustl.edu

Website: <http://dbbs.wustl.edu>

Faculty

Associate Dean for Graduate Education

Steven Mennerick

John P. Feighner Professor of Neuropsychopharmacology, Professor of Psychiatry, Associate Dean for Biology and Biomedical Sciences, Professor of Neuroscience
PhD, Washington University in St. Louis

Associate Directors

Eric Herzog

Professor of Biology, Professor of Neuroscience, Viktor Hamburger Distinguished Professor
PhD, Syracuse University

Heather True

Professor of Cell Biology and Physiology, David English Smith Professorship in Medicine
PhD, University of Illinois-Urbana-Champaign

Faculty Program Directors: Biochemistry, Biophysics, & Structural Biology

Thomas Brett

Associate Professor of Medicine, Associate Professor of Biochemistry and Molecular Biophysics, Associate Professor of Cell Biology and Physiology

PhD, University of Nebraska – Lincoln

Eric Galburt

Associate Professor of Biochemistry and Molecular Biophysics
PhD, University of Washington

Faculty Program Directors: Biomedical Informatics & Data Science

Philip Payne

Professor of Medicine, Director, Institute for Informatics, Professor, Professor of Computer Science and Engineering, Associate Dean for Health Information and Data Science for the School of Medicine, Chief Scientist for the School of Medicine, Janet and Bernard Becker Professor of Medicine

PhD, Columbia University

Po-Yin Yen

Associate Professor of Medicine, Division of General Medicine & Geriatrics, Associate Professor, Goldfarb School of Nursing, Barnes Jewish College

PhD, Columbia University

Faculty Program Directors: Cancer Biology

Grant Challen

Professor, Division of Oncology, Department of Medicine
PhD, University of Queensland, Brisbane, Australia

Jason Weber

Professor, Departments of Medicine, Cell Biology & Physiology, and Biology
PhD, Saint Louis University

Faculty Program Directors: Computational & Systems Biology

Gautam Dantas

Professor of Pathology and Immunology, Co-Division Chief - Division of Laboratory and Genomic Medicine, Professor of Biomedical Engineering, Professor of Molecular Microbiology, Professor of Pediatrics, Conan Professorship in Laboratory and Genomic Medicine
PhD, University of Washington – Seattle

Nancy Saccone

Associate Professor of Genetics
PhD, Brown University

Faculty Program Directors: Developmental, Regenerative, & Stem Cell Biology

Mayssa Mokalled

Associate Professor of Developmental Biology
PhD, UT Southwestern Medical Center at Dallas

Andrew Yoo

Phil and Sima Needleman Distinguished Professor of Developmental Biology
PhD, Columbia University

Faculty Program Director: Immunology

Eynav Klechevsky

Associate Professor of Pathology and Immunology
PhD, Israel Institute of Technology, Haifa, Israel and The Baylor Institute for Immunology Research

Faculty Program Directors: Molecular Cell Biology

Ben Major

Alan A. and Edith L. Wolff Professorship in Cell Biology and Physiology, Professor of Cell Biology and Physiology, Professor of Otolaryngology
PhD, University of Utah

Maria Remedi

Professor of Medicine and Cell Biology & Physiology
PhD, National University of Cordoba, Argentina

Faculty Program Directors: Molecular Genetics & Genomics

John Edwards

Associate Professor of Medicine
PhD, Columbia University

Jim Skeath

Professor of Genetics, Assistant Dean Academic Pathway Programs
PhD, University of Wisconsin – Madison

Faculty Program Directors: Molecular Microbiology & Microbial Pathogenesis

Megan Baldrige

Associate Professor of Medicine, Associate Professor of Molecular
Microbiology
MD/PhD, Baylor College of Medicine

Andrew Kau

Associate Professor, Division of Allergy and Immunology, Associate
Division Chief - Research
MD/PhD, Washington University in St. Louis

Faculty Program Directors: Neurosciences

Martha Bagnall

Associate Professor of Neuroscience
PhD, University of California – San Diego

Alexxai Kravitz

Associate Professor of Psychiatry, Interim Division Director for
Basic Neuroscience, Associate Professor of Neuroscience, Associate
Professor of Anesthesiology
PhD, University of Pennsylvania

Faculty Program Directors: Plant & Microbial Biosciences

Barbara Kunkel

Professor of Biology, Associate Chair of Undergraduate Education
PhD, Harvard University

Xuehua Zhong

Professor of Biology, Dean's Distinguish Professorial Scholar
PhD, The Ohio State University

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Degree Requirements

- Biochemistry, Biophysics, & Structural Biology, PhD
- Biomedical Informatics & Data Science, PhD
- Cancer Biology, PhD
- Computational & Systems Biology, PhD
- Developmental, Regenerative, & Stem Cell Biology, PhD
- Immunology, PhD
- Molecular Cell Biology, PhD
- Molecular Genetics & Genomics, PhD
- Molecular Microbiology & Microbial Pathogenesis, PhD
- Neurosciences, PhD
- Plant & Microbial Biosciences, PhD

Courses

For questions about course listings, please email
dbbscurriculum@wustl.edu.

BBS 5011 Ethics & Research Science

This course prepares DBBS graduate students to analyze and address ethical and professional issues across the range of their professional roles and responsibilities. The primary goals are for students to recognize complex situational dynamics and ethical issues and to develop professional and ethical problem-solving skills. The course examines ethical challenges related to research design and data collection, management, ownership, security, sharing, analysis, interpretation, and reporting while providing practical guidance on these issues. The course also examines the fundamentals of the broader research environment, including principles of ethics in genetics and human and animal subjects research, regulatory issues in biological and biomedical research, publication and authorship, and collaboration in science.

Credit 1 unit.

Typical periods offered: Spring Half B, Spring Half A, Spring, Spring Intersession, Summer

BBS 5014 Biotech Industry Innovators

Late one Friday afternoon in April 1976, the late venture capitalist Robert Swanson met with biochemist Herb Boyer, PhD, at his UCSF lab. Swanson had requested 10 minutes of Boyer's time; when the meeting ended, three hours later, the foundations had been laid for the formation of Genentech, the first biotechnology company, and the beginnings of the biotechnology industry. This course, The Basics of Bio-Entrepreneurship, investigates issues and choices that inventor/scientists encounter when considering the applications and commercialization of early stage scientific discoveries. This course is intended for anyone interested in working in the medical device, life-, bio-, or pharma-sciences industries as a founder, scientist, entrepreneur, manager, consultant, or investor. It focuses on the decision processes and issues that researchers and their business partners face when considering how a discovery might best be moved from academia to successful commercialization.

Credit 3 units.

Typical periods offered: Fall, Spring

BBS 5053 Immunobiology I

Immunobiology I is taught by the faculty members of the Immunology Program. This course covers in depth modern immunology and are based on Janeway's Immunobiology 10th Edition textbook. The topics include: basic concepts in immunology, innate immunity: the first lines of defense, the induce responses of innate immunity, antigen recognition by B-cell and T-cell receptors, the generation of lymphocyte antigen receptors, antigen presentation to T lymphocytes and signaling through immune system receptors.

Credit 4 units.

Typical periods offered: Fall

BBS 5054 Immunobiology II

Immunobiology II is taught by the faculty members of the Immunology Program. This course covers in depth modern immunology and are based on Janeway's Immunobiology 10th Edition textbook. The topics include: the development and survival of lymphocytes, T cell-mediated immunity, the humoral immune response, dynamics of adaptive immunity, the mucosal immune system, failures of host defense mechanisms, allergy and allergic diseases, autoimmunity and transplantation, and manipulation of the immune response.

Credit 4 units.

Typical periods offered: Spring

BBS 5068 Fundamentals of Molecular Cell Biology

This is a core course for incoming graduate students in Cell and Molecular Biology programs to learn about research and experimental strategies used to dissect molecular mechanisms that underlie cell structure and function, including techniques of protein biochemistry. Enrolling students should have backgrounds in cell biology and biochemistry. The format is two lectures and one small group discussion section per week. Discussion section focuses on original research articles.

Credit 4 units.

Typical periods offered: Fall

BBS 5075 Introduction to Coding and Statistical Thinking for Genetics and Genomics

This course is designed for first-year DBBS students who have had little to no prior experience in programming or statistics. The course will cover common statistical practices and concepts in the life sciences, such as error bars, summary statistics, probability and distributions,

and hypothesis testing. The class will also teach students basic programming skills for statistical computation, enabling them to retrieve and analyze small and large data sets from online databases and other sources.

Credit 2 units.

Typical periods offered: Fall

BBS 5084 Single Molecule Biophysics Journal Club

Molecular motors in the cell harness chemical energy to generate mechanical work in a host of processes including cell motility, DNA replication and repair, cell division, transcriptional regulation, and intracellular transport. The purpose of this course is to discuss recent advances in the field of molecular motors. Special emphasis will be placed on understanding and critically evaluating single molecule studies. The course will consist of both journal club presentations and small group discussions.

Credit 1 unit.

Typical periods offered: Spring

BBS 5098 Graduate Research Fundamentals

This course introduces first-year Ph.D. students to the foundational skills, knowledge, and habits of mind required of successful independent biological scientists: 1) Social dynamics in the scientific research enterprise 2) Epistemology and ethics of bioresearch methods 3) Development and communication of research questions and results 4) Interdisciplinary scientific thinking. Class sessions and homework introduce these topics; major assignments prompt student to connect them with the broader scope of graduate training in lab rotations, course work, and interdisciplinary scientific seminars. The interactive, student-driven class structure facilitates autodidactic development while integrating small group activities and peer mentoring from advanced DBBS students.

Credit 0.5 units.

Typical periods offered: Fall

BBS 5123 Experimental Hematopoiesis Journal Club

Journal club in which papers that describe significant advances in the field of experimental hematopoiesis are discussed. Students are expected to present one paper per semester and attend the weekly (1 hour) session.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5137 TriMED: Membrane Excitability and Disease

TriMED consists of seminars, work-in-progress talks and journal club presentations. It meets Monday lunchtime (1-2pm, with lunch provided) from Jan - end April and from Sept - end November (1 credit each semester). Any student signed up for credit has to attend regularly and make one half hour presentation (either of their own research, or of a paper). The attendees are a mix of students, post-docs and faculty, but the goal is for trainee experience. The course is designed to fulfil interest in membrane proteins or signaling, ion channels, electrophysiology, neurobiology or excitability more broadly.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5138 Journal Club for the Molecular Mechanism of Aging

Why do we age? What causes aging? How is our life span determined? This journal club will address such fundamental, but challenging questions of aging and longevity. Recent studies on aging and longevity are now unveiling regulatory mechanisms of the complex biological phenomenon. We'll cover the latest progress in this exciting field

and stimulate discussions on a variety of topics including aging-related diseases. One hour of paper presentation or research talk and discussion per every two weeks. Registered students are expected to have at least one presentation for 1 unit credit.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5146 Principles and Applications of Biological Imaging

Principles and Applications of Biological Imaging will introduce the interdisciplinary nature of the imaging sciences and conduct a comprehensive survey of the array of interrelated topics that define biological imaging. The course will cover the basics of the optical, magnetic resonance, CT, SPECT and PET imaging modalities, and microscopy, while focusing on applications of imaging to different disease states, such as oncology, neurology, cardiology and pulmonary diseases.

Credit 3 units.

Typical periods offered: Fall

BBS 5147 Contrast Agents for Biological Imaging

Contrast Agents in Biological Imaging will build the chemistry foundations for the design and use of contrast agents in imaging applications such as nuclear medicine, magnetic resonance imaging (MRI) and optical imaging. The course will include lectures on the design of radiopharmaceuticals for gamma scintigraphy and positron emission tomography, MRI contrast agents and agents for optical imaging, including bioluminescence and fluorescence microscopy. One year of general chemistry, one semester of organic chemistry required.

Credit 3 units.

Typical periods offered: Spring

BBS 5148 Metabolism Journal Club

The purpose of the Metabolism Journal Club is to introduce the graduate students to advanced topics spanning the biochemistry, cell biology and genetics of cellular and whole body metabolism. Under the guidance of the course directors, students will select recent topical articles for discussion in the weekly journal club. Students will be expected to provide a succinct introduction to the topic and lead discussion of the data presented in the journal article. Students will be evaluated on the basis of their presentation and their participation in the seminar throughout the semester.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5152 Rad Journal Club (Regeneration, Aging, and Development)

Focuses on developing a dialog around current topics in developmental and regenerative biology at the molecular, cellular and systems levels.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5191 Pathobiology of Human Disease States

Three human disease states will be discussed in detail. Topics will include background clinical and epidemiological information, followed by a detailed examination of the molecular and cellular events that underlie the disease state. Examples of pertinent topics include Alzheimer's disease, AIDS, leukemia, cystic fibrosis, sickle cell anemia, diabetes, etc.

Credit 2 units.

Typical periods offered: Fall

BBS 5192 Cancer Biology Journal Club

This journal club covers current papers in molecular oncology, cancer genetics and contemporary molecular biology. Presentations will be given by students, post-docs and faculty, then discussed.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5196 Special Emphasis Pathway in Cancer Biology

This course is designed to present pre- and postdoctoral trainees with an organized educational format to explore major contemporary topics in cancer biology. The elective will provide an integrated view of cancer research including basic science, translational science, and clinical investigation. Approximately 60 minutes will be devoted to a didactic presentation by a faculty member with interaction by the participants. The remaining 30 minutes will be used to discuss a pivotal research paper from this field, preselected by the faculty member. Outside reading (30-60 min/week) will be required.

Credit 2 units.

Typical periods offered: Spring

BBS 5201 Membrane Protein Biophysics Journal Club

Cells are encapsulated by lipid bilayers providing a physical barrier for the passage of charged molecules and ions in and out of the cell. The proteins that reside within this layer of oil are called membrane proteins, and they act as the molecular gatekeepers, controlling the passage of ions, nutrients, waste products and signaling elements, across cell membranes. This journal club focuses on examining key literature in the field that investigates how membrane proteins fold, adopt certain structures, and how they function inside of the strange environment of the lipid membrane. The papers will be selected from biophysical studies that combine new and notable research with key historical work, for a broad perspective of the science being conducted in this complex and emerging field. Special emphasis will be placed on emerging topics, such as regulation of protein function by lipid composition, membrane protein synthesis and folding, cutting-edge developments in membrane biophysics. The course will consist of both journal club presentations, as well as small group discussions in the form of chalk-talks.

Credit 1 unit.

Typical periods offered: Spring

BBS 5217 Special Topics in Microbial Pathogenesis

Primarily for graduate and MSTP students, this course involves oral presentation and discussion of current research articles on pathogenic microorganisms (bacteria, viruses, parasites, and fungi). Discussion will include design of specific aims for research proposals. Emphasis will be on literature that addresses the cellular and molecular basis of host-pathogen interactions. Students are expected to prepare all articles covered and to participate actively in each discussion. Class meets twice per week for 1.5 hours each.

Credit 2 units.

Typical periods offered: Spring

BBS 5224 Molecular, Cell and Organ Systems

This course will introduce Ph.D. and MSTP students to fundamental problems in cell and molecular biology at the systems level. The course is divided into 5 themes: 1) microbial systems; 2) organ development and repair; 3) cardiovascular system and disease; 4) tumor & host systems; and 5) metabolic systems and disease. Topics within each theme highlight current research concepts, questions, approaches and findings at the molecular, cellular and physiological levels. Students will write an original research grant proposal on a topic of their choosing in one of the 5 themes. Students will critique proposals anonymously in an NIH-like study section.

Credit 3 units.

Typical periods offered: Spring

BBS 5235 Genetics Journal Club

This journal club will be focused on the Genetics department seminar series. Students will present one or a few recent papers by the seminar speaker scheduled for that week. Students will provide a brief written evaluation (on a form that will be provided) of their peers' presentations, and the faculty advisors will meet with each student after the presentation to provide feedback.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5255 Experimental Skeletal Biology Journal Club

The journal club, which meets weekly, focuses on cellular and molecular biology of the skeleton. Emphasis is placed on gaining insights into normal skeletal homeostasis as well as systemic disorders of bone. Papers presented for review are selected from the most competitive journals. Participants are encouraged to think outside of the box and discuss novel molecular discoveries that may impact bone cell function.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5272 Advanced Topics in Immunology

This course uses a journal club format to discuss contemporary issues in the cell and molecular biology of the immune system. Discussions focus on the use of current approaches to analyze the cellular and molecular basis of immunity. Topics include mechanisms of antigenic specificity, diversity, cell communication, differentiation, activation, and effector activity.

Credit 2 units.

Typical periods offered: Fall

BBS 5282 Chromatin Structure and Gene Expression

This special topics course will use *Epigenetics* ed. by Allis, Jenuwein, Reinberg, and Caparros (2007, Cold Spring Harbor Laboratory Press) as the organizing text. Each week a faculty member will provide a background lecture on an important topic or model system, and a student will present and lead discussion of a paper from the current scientific literature related to the previous week's background lecture. Topics to be considered will include background on chromatin structure, histone modifications and histone variants; epigenetic regulation in yeast, other fungi, ciliates, flies, mammals and plants; dosage compensation in different systems; DNA methylation and imprinting in mammals; stem cells, nuclear transplantation and reprogramming; and the epigenetics of cancer and other human diseases (some variation in topics in different years). Students enrolled in the course will be required to present one paper and to come prepared to each session, with a question for discussion.

Credit 2 units.

Typical periods offered: Spring

BBS 5284 Current Research in Chromatin, Epigenetics and Nuclear Organization

This journal club considers papers from the current literature on chromatin structure and function, with an emphasis on regulation of transcription, epigenetics and genomics. Presentations are given by students, postdocs and faculty, with discussion by all. Students enrolled for credit are expected to attend regularly, and to present a minimum of one paper during the term, with consultation and critique from the faculty.

Credit 1 unit.

Typical periods offered: Spring

BBS 5285 Current Topics in Human and Mammalian Genetics

This course aims to provide both biologists and those with mathematical backgrounds with a basis in mammalian genetics. The course will include the following modules: Nucleic acid biochemistry; Gene and chromosome organization; Introduction to Human Genetics; Mutations and DNA repair; Cancer Genetics; Genomic methodologies; Biochemical genetics; Murine Genetics; Epigenetics; Neurodegenerative diseases; Mitochondrial disorders; Pharmacogenetics; Introduction to human population genetics; Applications of modern human genetics; Introduction to web-based informatics tools for molecular genetics. One of the required courses in the Quantitative Human Statistical Genetics graduate program.

Credit 3 units.

Typical periods offered: Fall

BBS 5288 Special Topics in Molecular Genetics

A special topics course with lectures and discussion on the molecular basis of cancer including cell cycle regulation, tumor suppressor genes, tumor invasion, angiogenesis, immune evasion, resistance to apoptosis, signaling, imaging, gene expression, chromosomal translocations, and viral oncology.

Credit 2 units.

Typical periods offered: Spring

BBS 5303 Protein NMR Journal Club

This journal club covers the recent literature on protein NMR with a focus on using NMR to study protein function, NMR dynamics, and novel methods that expand the range of systems accessible to solution NMR studies. Students, postdocs and faculty discuss a recent paper and present background information on the relevant technical aspects of NMR. Students receive 1 credit for participation and presenting one paper.

Credit 1 unit.

Typical periods offered: Fall

BBS 5311 Dynamics in Mesoscopic Molecular Systems

This course will provide a background in the theory of the dynamics of mesoscopic systems and introduction to methods for measuring the dynamics of these systems. It will include measurement methods, some of which are in common use and others that have only recently been introduced. This course would be useful for biophysics students and others that are interested in molecular processes and mechanisms in small systems such as cells.

Credit 3 units.

Typical periods offered: Spring

BBS 5312 Macromolecular Interactions

This course will cover equilibria, kinetics and mechanisms of macromolecular interactions from a quantitative perspective. Thermodynamics, multiple binding equilibria (binding polynomials), linkage phenomena, cooperativity, allostery, macromolecular assembly, analysis of binding isotherms, enzyme catalysis and mechanism, steady-state and pre-steady-state kinetics, kinetic simulation, and isotope effects.

Credit 3 units.

Typical periods offered: Spring

BBS 5318 DNA Repair

This course is an advanced graduate course that explores all aspects of DNA damage and the cellular responses to DNA damage. It is designed for graduate students who have a working knowledge of chemistry, molecular biology and cellular biology, and for interested postdocs and researchers. Specific topics that will be covered are: The chemical basis



of DNA damage, specific DNA repair mechanisms, cell cycle responses to damage, translesion DNA replication and mutagenesis, and human diseases related to defects in DNA damage response. The course consists of a lecture module, open to all, and a discussion module for registered students. In addition, several invited speakers in the field of DNA repair will give seminars and meet with registered students for discussion. Students will present and discuss research papers. Grades will be given based on student presentation and participation. Prerequisite: Permission of instructor.

Credit 2 units.

Typical periods offered: Spring

BBS 5319 Molecular Foundations of Medicine

This course will cover fundamental aspects of biochemistry and cell biology from a medical perspective. The course begins with a treatment of protein structure and the function of proteins in the cytoskeleton and cell motility. The principles of enzyme kinetics and regulation are then discussed and basic pathways for the synthesis and metabolism of carbohydrates and lipids are introduced. This leads in to a discussion of membrane structure and the function cellular organelles in biological processes including energy production, protein degradation and protein trafficking.

Credit 3 units.

Typical periods offered: Fall

BBS 5327 Optical Spectroscopy: Theory and Applications

Spectroscopic methods to be covered include fluorescence, both ensemble and single molecule, and absorption (circular dichroism); fluorescence correlation spectroscopy will also be discussed. The quantum chemistry /physics behind these methods will be reviewed.

Credit 2 units.

Typical periods offered: Fall

BBS 5328 Structural Biology Journal Club

Multi-laboratory research colloquia for DBBS graduate students focused on structural biology and complementary biophysical techniques. Course credit requires student presentation for credit.

Credit 1 unit.

Typical periods offered: Spring

BBS 5336 Computational Biophysics Journal Club

This course covers a combination of classic and recent publications on computational methods for studying biomolecules. Students participating for credit will be required to present at least once.

Credit 1 unit.

Typical periods offered: Spring

BBS 5357 Chemistry and Physics of Biomolecules

This course covers three major types of biomolecular structures: proteins, nucleic acids, and membranes. Basic structural chemistry is presented as well as the biophysical techniques used to probe each type of structure. Selected topics covered include protein folding, protein design, X-ray crystallography, NMR spectroscopy, nucleic acid bending and supercoiling, nucleic acid:protein interactions, RNA folding, membrane organization, fluidity, permeability and transport, and membrane channels. The weekly discussion section will cover problem sets and present current research papers. This is one of the required courses for the biochemistry and for the molecular biophysics graduate programs. Prior course work in biochemistry and physical chemistry is recommended but not required.

Credit 3 units.

Typical periods offered: Fall

BBS 5358 Biochemical and Biophysical Investigations of Infectious Diseases Journal Club

Biochemical and biophysical approaches continue to advance as powerful approaches to the understanding of human disease processes. This journal club covers recent papers in which these approaches address aspects of infectious diseases or inflammation. Students who enroll for credit will be expected to participate in weekly presentations and to present one to two papers along with accompanying background information.

Credit 1 unit.

Typical periods offered: Spring

BBS 5392 Molecular Microbiology & Pathogenesis

Course is devoted to studying microorganisms, particularly those that cause disease, with an emphasis on the molecular interactions between pathogens and hosts. First third of the course focuses on virology, second third on bacteriology and the last third on eukaryotic pathogens.

Credit 4 units.

Typical periods offered: Fall, Spring

BBS 5393 Molecular Virology Journal Club

Journal club covering a broad range of topics in virology with an emphasis on pathogenesis or molecular biology of medically important viruses. A minimum of one student presentation with faculty critique.

Credit 0.5 units.

Typical periods offered: Fall, Spring

BBS 5397 Current Literature in Microbiology

Presentations by students on a broad range of topics of current interest in microbiology. The course will emphasize presentations and discussion skills. Credit requires attendance and participation at all sessions and one presentation.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5412 Tropical and Molecular Parasitology

Graduate level seminar course focusing on current scientific literature in molecular parasitology. The journal club will meet biweekly during the Fall and Spring semesters. Students will attend both semesters in order to receive one credit. The seminar series will run jointly with a research conference in Tropical and Molecular Parasitology. Outside speakers will be invited for the seminar series to emphasize important developments in tropical medicine and molecular parasitology. In advance of the invited speakers, topics will focus on their previous research publications.

Credit 0.5 units.

Typical periods offered: Fall

BBS 5417 Hematology Division Journal Club: Current Topics in Cellular, Molecular, and Stem Cell Biology

This journal club covers a broad range of topics of current interest, including the fields of biochemistry, molecular biology, cell biology, developmental biology, and immunology. Speakers usually give a brief background to introduce the topic and then focus on one-two papers from the current literature. Presentations are given by graduate students, post-doctorates, and faculty. Each attendee presents two-three times per year. Participants are expected to attend all the sessions. This journal club was founded in 1966.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5425 Immunology of Infectious Diseases Journal Club

The goal of this Journal Club (JC) is to provide 2nd year students in MMMP program a platform to discuss new and emerging concepts on mechanisms by which host immune responses mediate protection against infectious diseases. This exercise will also enable the student who attend the fundamental Immunology course to apply their knowledge to understand the basis for immunology of infectious diseases. The format will include faculty who will select cutting-edge papers and head the discussion during the JC session.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5426 ID Gateway: Translational and Public Health Aspects of Basic Infectious Disease Research

This course provides an opportunity for students, postdoctoral fellows, infectious disease fellows and faculty to explore issues at the interface between patient care, public health and basic research in the area of microbial pathogenesis.

Credit 2 units.

Typical periods offered: Spring

BBS 5445 DNA Metabolism Journal Club

Presentation of current research papers in DNA replication, DNA repair, and DNA recombination, with an emphasis on basic biochemical and biophysical approaches.

Credit 1 unit.

Typical periods offered: Spring

BBS 5456 Advanced Crystallography

The advanced course in Protein Crystallography will address all aspects of modern protein crystallography including fundamentals of crystallography, the derivation of the structure factor and electron density equation, symmetry and space groups, direct methods, isomorphous replacement, molecular replacement, data collection, and crystal growing theory and techniques. Prerequisite, Physical Chemistry & Bio 5325 Protein Structure and Function. Two class hours per week.

Credit 2 units.

Typical periods offered: Spring

BBS 5469 Biochemistry, Biophysics, and Structural Biology Seminar

Student presentation of Biochemistry, Biophysics or Structural Biology topic. Second Year Students present from literature; senior students give formal research seminar. Attendance required of all BBSB Graduate Students.

Credit 0.5 units.

Typical periods offered: Fall, Spring

BBS 5480 Nucleic Acids & Protein Biosynthesis

Fundamental aspects of the structure, biosynthesis, and function of nucleic acids and the biosynthesis of proteins. Emphasis on mechanisms involved in the biosynthetic processes and the regulation thereof. Lecture course supplemented with student discussions of research papers.

Credit 3 units.

Typical periods offered: Fall

BBS 5483 Human Genetic Analysis

Basic Genetic concepts: meiosis, inheritance, Hardy-Weinberg Equilibrium, Linkage, segregation analysis; Linkage analysis: definition, crossing over, map functions, phase, LOD scores, penetrance, phenocopies, liability classes, multi-point analysis, non-parametric analysis (sibpairs and pedigrees), quantitative trait analysis,

determination of power for mendelian and complex trait analysis; Linkage Disequilibrium analyses: allelic association (case control designs and family based studies), QQ and Manhattan plots, whole genome association analysis; population stratification; Quantitative Trait Analysis: measured genotypes and variance components. Hands-on computer lab experience doing parametric linkage analysis with the program LINKAGE, model free linkage analyses with Genehunter and Merlin, power computations with SLINK, quantitative trait analyses with SOLAR, LD computations with Haploview and WGAViewer, and family-based and case-control association analyses with PLINK and SAS. The methods and exercises are coordinated with the lectures and students are expected to understand underlying assumptions and limitations and the basic calculations performed by these computer programs. Auditors will not have access to the computer lab sessions.

Credit 3 units.

Typical periods offered: Fall

BBS 5484 Genetics and Development of C. Elegans Journal Club

Students will present a research paper (or present their current thesis research) and the appropriate background material.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5487 Genetics and Genomics of Disease

The course will cover the use of genomic and genetic information in the diagnosis and treatment of disease, with an emphasis on current practice and existing gaps to be filled to achieve precision medicine. Areas of discussion include: bioinformatics methods; assessment of pathogenicity; use and curation of disease variant databases; discovery of incidental findings; genomics applications in Mendelian disease, complex traits, cancer, pharmacogenomics, and infectious disease; design of clinical trials with genetic data; ethical and policy issues.

Credit 2 units.

Typical periods offered: Fall, Spring

BBS 5488 Genomics

This course is designed for beginning graduate students who want to become familiar with the basic concepts and applications of genomics. The course covers a wide range of topics including how genomes are mapped and sequenced as well as the latest computational and experimental techniques for predicting genes, splice sites, and promoter elements. High throughput techniques for ascribing function to DNA, RNA, and protein sequences including microarrays, mass spectrometry, interspecies genome comparisons, and genome-wide knock-out collections will also be discussed. Finally, the use of genomic techniques and resources for studies of human disease will be discussed. A heavy emphasis will be put on students acquiring the basic skills needed to navigate databases that archive sequence data, expression data and other types of genome-wide data. Through problem sets, the students will learn to manipulate and analyze the large data sets that accompany genomic analyses by writing simple computer scripts. While students will become sophisticated users of computational tools and databases, programming and the theory behind it are not covered in this course.

Credit 4 units.

Typical periods offered: Spring

BBS 5489 Human Genetics Journal Club

In this biweekly journal club on Human Genetics we will present and discuss current cutting edge papers in human and mammalian molecular genetics. Students learn presentation skills, how to critique a paper and how to interact with a very active and critical audience. Any person interested in the current state of the art in Human

Genetics may attend this course. It is a requirement that all students wishing to earn credit in this course must present a 1.5 hour journal club talk and must regularly attend and participate in the journal club throughout the year.

Credit 0.5 units.

Typical periods offered: Fall, Spring

BBS 5491 Advanced Genetics

Fundamental aspects of organismal genetics with emphasis on experimental studies that have contributed to the molecular analysis of complex biological problems. Examples are drawn primarily from yeast, nematodes, fruit flies, mouse, and humans. Students will conceive and write an original research proposal with a substantial genetics component; the learning goal is to build skills in developing hypotheses from the literature and designing experimental approaches to test those hypotheses.

Credit 3 units.

Typical periods offered: Spring

BBS 5496 Seminar in Computational Molecular Biology

Students present current research papers and the appropriate background material in the field of Computational Biology. Arts & Sciences students must take this course for credit; Engineering students must take this course Pass/No Pass.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5499 Cancer Informatics Journal Club

This journal club will explore current topics in cancer informatics. Current literature will be reviewed for advanced cancer genome analysis methods, statistics, algorithms, tools, databases, and other informatics resources.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5500 Medical Genetics

A significant portion of the first-year course in basic medical genetics devoted to human and clinical genetics, with emphasis on how genomic information will transform the practice of medicine. Topics covered include population genetics; molecular basis of mutations; human functional genomics; mouse models of human disease; pharmacogenomics; metabolic defects. Lectures, small group discussions, patient information session.

Credit 2 units.

Typical periods offered: Spring

BBS 5501 Biology of the Visual System

The purpose of the course is to provide a fascinating view of vertebrate eye development, anatomy, physiology and pathology. Topics to be covered include the molecules that control eye formation, ocular stem cells, the physiology of transparency, hereditary ocular diseases, phototransduction, the neurobiology of the retina and central visual pathways, age-related eye diseases, and many others. The course is open to all second year graduates students and above. Ophthalmology residents and postdocs with an interest in vision are strongly encouraged to attend.

Credit 3 units.

Typical periods offered: Fall

BBS 5505 Independent Study in Fundamentals of Molecular and Microbial Genetics

This literature-based course will introduce students to seminal and current studies in molecular and microbial genetics. Students will read and present a minimum of 12 landmark papers that helped shape our understanding of molecular and microbial genetics. Emphasis will be placed on students' ability to comprehend and explain these studies via chalk talks. All presentations will be given by students.

Credit 2 units.

Typical periods offered: Fall, Spring

BBS 5507 Genome Engineering Methods and Applications

This course will cover the basic principles of genome engineering with emphasis on Cas9/CRISPR technology. It will consist of discussion sessions in which students will present assigned manuscripts followed by a general discussion of the topic directed by the instructor. The course will cover the mechanisms of genome editing using host DNA repair systems, the function of Cas9, and how Cas9 can be harnessed to introduce defined mutations into almost any genome. The use of Cas9 to activate or repress genes, alter chromatin modifications, and the application of these Cas9 systems to conducting genome-scale screens in mammalian cells as well as its use in studying cell fate will be highlighted. Finally, we will study how Cas9 methodologies can be used to introduce disease-associated variants into pluripotent stem cells (e.g. iPSCs) that can be differentiated into disease-relevant cell for use in functional genomic studies.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5512 Diseases of Membrane Transport & Excitability

Classes will consider the molecular basis of the disease as well as animal models and current clinical studies. Addressing studies from the level of basic biophysical and molecular properties of the underlying ion channels/transporters, to the cellular defects, to organ and animal outcomes and therapies., which will encourage and force students to develop their ability to integrate understanding at multiple levels. Students will be introduced to emerging ideas in clinical diagnosis, management and treatment, when appropriate, clinical specialists will allow student participants to directly observe and participate in the clinical experiences.

Credit 2 units.

Typical periods offered: Spring

BBS 5513 ITVS Project Building

The overall goal is to have intense guidance to construct a grant/fellowship application. Students should expect to have a near completed F30/F31 application by the end of this course. Students will study previous F30/F31 applications and sit on a mock panel to review real world grants from their peers. They will use this experience to understand the reviewers perspective when writing fellowships and grants in the future. Students will draft all portions of a research proposal with feedback from their peers, the course instructor and faculty mentors.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5540 Neural Sciences

An integrated course dealing with the structure, function and development of the nervous system. The course will be offered in the Spring of the first year Medical School calendar.

Credit 5 units.

Typical periods offered: Spring

BBS 5543 Oral Presentation of Scientific Data

Practical course on how to prepare and present scientific data to an audience. Meets once a week for 90 minutes.

Credit 1 unit.

Typical periods offered: Spring

BBS 5571 Cellular Neurobiology

This course will present a fully integrated overview of nerve cell structure, function and development at the molecular and cellular level. Broad topics to be covered include gene structure and regulation in the nervous system, basic neurophysiology, presynaptic and postsynaptic mechanisms of chemical neurotransmission, sensory transduction, neurogenesis and migration, axon guidance and synapse formation. Three 90 minute lectures plus one 75 minute paper discussion section per week. There will be four exams, as well as weekly quizzes.

Credit 6 units.

Typical periods offered: Fall

BBS 5572 Principles of Medicinal Chemistry

Overview of basic principles of medicinal chemistry covering drug targets and concepts of metabolism, efficacy and potency as relevant to drug design.

Credit 3 units.

Typical periods offered: Fall

BBS 5577 Synapses Journal Club

Synaptic function and malleability are fundamental to nervous system function and disease. This is an advanced seminar in the development, structure, and function of the synapse in health and disease. It is a natural extension of topics covered in Bio 5571. It may be primarily of interest to students in the Neurosciences Program, but also to students in MCB, Development, Biochemistry, Computational Biology, and Molecular Biophysics. Generally a topic for the semester helps focus the group; past topics have included Synapses and Disease, Neurotransmitter Transporters, Glutamate Receptors, Dendrites, GABA receptors. Participants (students, postdocs, and faculty) alternate responsibility for leading critical discussion of a current paper. Active participation offers the opportunity for students to hone their critical thinking and presentation skills. Students enrolling for credit will be expected to attend each week, to lead discussion once per semester and to provide written critiques (1-2 pages each) of two papers.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5617 Development Biology PhD Program Seminar

In response to student feedback for additional training in Developmental Biology obtained from surveys and group meetings, we propose a new seminar course in Developmental Biology. This once a week course will introduce student in the Developmental, Regenerative, and Stem Cell Biology PhD Program both to the classical embryological experiments that define key concepts in developmental biology, such as cellular fields, equivalence groups, cytoplasmic determinants, and the more modern experiments that uncovered the genetic and molecular basis of these processes. In general, the classes will be individual sessions on professional development, such as scientific presentation, how to navigate graduate school, etc.

Credit 1 unit.

Typical periods offered: Fall

BBS 5619 Advanced Cognitive, Computational, and Systems Neuroscience

This course will develop critical thinking and analysis skills with regard to topics in Cognitive, Computational and Systems Neuroscience. Course format will be a series of modules composed of intensive, faculty-led case studies on interdisciplinary topics at the intersection of psychology, computation and neuroscience. The goal will be to highlight the benefits of integrative, interdisciplinary approaches, by delving into a small set of topics from a variety of perspectives, rather than providing a survey-level introduction to a broader set of topic areas. Modules will involve a combination of lectures and student-led discussion groups, with students further expected to complete a multi-disciplinary integrative final review paper. Case-study topics will vary somewhat from year to year, but are likely to include some of the following: temporal coding as a mechanism for information processing, coordinate transformations in sensory-motor integration, mechanisms of cognitive control, motor control strategies including application to neural prosthetics, and memory systems in health and disease.

Credit 3 units.

Typical periods offered: Fall

BBS 5622 Cognitive, Computational, and Systems Neuroscience Project Building

The goal of this course is to help students in the CCSN Pathway develop the critical thinking skills necessary to develop and implement high quality, interdisciplinary research projects. Throughout the course of the semester, each student will develop a research plan in their chosen area of interest. The plan will be developed in consultation with at least two faculty members (from at least two different subdisciplines within the pathway) as well as the other students and faculty participating in the course. The culmination of this course will be for each student to produce an NIH-style grant proposal on the research project of their choosing. For most students, this will serve either as their thesis proposal or a solid precursor to the thesis proposal. The course will be designed to help facilitate the development of such a research plan through didactic work, class presentations, class discussion, and constructive feedback on written work. The course will begin with a review of written examples of outstanding research proposals, primarily in the form of grant submissions similar to those that the students are expected to develop (i.e., NRSA style proposals, R03 proposals). Review of these proposals will serve as a stimulus to promote discussion about the critical elements of good research proposals and designs in different areas. Each student will be expected to give three presentations throughout the semester that will provide opportunities to receive constructive feedback on the development and implementation of research aims. The first presentation (towards the beginning of the semester) will involve presentation of the student's general topic of interest and preliminary formulation of research questions. Feedback will emphasize ways to focus and develop the research hypotheses into well-formulated questions and experiments. The second presentation will involve a more detailed presentation of specific research questions (along the lines of NIH-style Specific Aims) and an initial outline of research methods. The final presentation will involve a fuller presentation of research questions and proposed methods. Feedback, didactic work, and group discussion throughout the semester will include guidance on critical components of the development of a research plan, including how to perform literature searches, formulate testable hypotheses, write critical literature summaries, and design experiments and analyses. The course will meet once a week, with faculty members from different tracks within the Pathway present at each meeting. This will allow students to receive feedback from several perspectives.

Credit 3 units.

Typical periods offered: Fall, Spring

BBS 5646 First-Year Fundamentals

This course will provide a two-part introduction to neuroscience research fundamentals. Namely, it will introduce elementary statistical analysis for neuroscience research as well as grant writing to support neuroscience-related research. Enrollment is limited to first-year neuroscience students.

Credit 0.5 units.

Typical periods offered: Spring

BBS 5648 Coding and Statistical Thinking in the Neurosciences

Students are introduced to scientific programming in Python. Students will learn common programming constructs and how to visualize and analyze data. Coding will be integrated into a statistics curriculum introducing summary statistics, probability distributions, simulation and hypothesis testing, and power analysis for experimental design.

Credit 3 units.

Typical periods offered: Fall, Spring

BBS 5651 Neural Systems

The course will consist of lectures and discussions of the sensory, motor and integrative systems of the brain and spinal cord, together with a weekly lab. The lectures will present aspects of most neural systems, and will be given by faculty members who have specific expertise on each topic. The discussions will include faculty led group discussions and papers presented and discussed by students. The labs will include human brain dissections, examination of histological slides, physiological recordings, behavioral methods, computational modeling, and functional neural imaging.

Credit 6 units.

Typical periods offered: Spring

BBS 5663 Neurobiology of Disease

This is an advanced graduate course on the pathology of nervous system disorders. This course is primarily intended to acquaint Neuroscience graduate students with a spectrum of neurological diseases, and to consider how advanced neuroscientific approaches may be applied to promoting recovery in the brain. Topics will be presented by Washington University faculty members and include: neurooncology, stroke, retinal disease, perinatal brain injury, neurodegenerative disorders, neuroinflammation, epilepsy, and psychiatric disorders. The class will meet for 2 hours each week. Each session will be led by a faculty guest with expertise in a specific neurological or psychiatric disease. In the first hour, the speaker will discuss clinical manifestations and pathophysiology. Where possible, the clinical presentation will be supplemented with a patient demonstration or videotape. After a 30 minute break for pizza and soda, the second hour will follow a journal club format. Two or three students will review current papers assigned by the speaker or course director. This course is offered in alternate years. Prerequisite: Introductory neuroscience course at the graduate or medical school level.

Credit 2 units.

Typical periods offered: Spring

BBS 5678 Clocksclub

Clocksclub focuses on recent advances in the study of biological timing including sleep and circadian rhythms. Participants discuss new publications and data on the molecules, cells and circuits underlying daily rhythms and their synchronization to the local environment. Students registered for this journal club will lead a discussion once during the semester.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5702 Current Approaches in Plant and Microbial Research

This course is designed to introduce graduate students and upper-division undergraduates to contemporary approaches and paradigms in plant and microbial biology. The course includes lectures, in-class discussions of primary literature and hands-on exploration of computational genomic and phylogenetic tools. Evaluations include short papers, quizzes, and oral presentations. Over the semester, each student works on conceptualizing and writing a short NIH-format research proposal. Particular emphasis is given to the articulation of specific aims and the design of experiments to test these aims, using the approaches taught in class. Students provide feedback to their classmates on their oral presentations and on their specific aims in a review panel.

Credit 4 units.

Typical periods offered: Spring

BBS 5703 Experimental Design and Analysis in Biological Research

In-depth exploration of landmark and current papers in genetics, molecular and cell biology, with an emphasis on prokaryotes and eukaryotic microbes. Class discussions will center on such key discoveries as the chemical nature of genetic material, the genetic code, oxygen producing light-spectrum, cell-cell signaling, transcriptional regulation, the random nature of mutation, and cell cycle regulation. Emphasis will be placed on what makes a good question or hypothesis, expedient ways to address scientific problems, and creative thinking. The last third of the course will consist of student-run seminars on selected topics to increase proficiency in the synthesis of new material and public presentation skills.

Credit 2 units.

Typical periods offered: Fall

BBS 5723 Seminar in Plant and Microbial Bioscience

This course emphasizing presentation skill and critical analysis counts towards the PMB Graduate Program's journal club course requirement. Students will be responsible for dividing and presenting 30 current research publications selected by the course masters. In addition to assembling brief PowerPoint presentations providing background and significance for their assigned articles, students are expected to provide classmates with a 1 page primer and short list of relevant references

Credit 2 units.

Typical periods offered: Fall, Spring

BBS 5801 Biochemistry & Molecular Biophysics Seminar Journal Club

This will be a journal club-based seminar course mirroring the topics covered by Biochemistry and Molecular Biophysics (BMB) seminar speakers during the concurrent semester. Students will present a paper published by one of the BMB seminar speakers one-week ahead of that speaker's seminar. This will allow students and faculty to become more familiar with the research programs of BMB invited speakers, likely stimulating discussion within the Q&A period after the seminar, as well as during informal meet-the-speaker lunch sessions. Students will be evaluated on their journal club presentation, attendance and class participation.

Credit 1 unit.

Typical periods offered: Spring

BBS 5840 Climate Change Reading Group

The Climate Change Reading Group is made up of multi-disciplinary faculty and students from multiple institutions in St Louis: WUSTL, UMSL, SLU, Missouri Botanical Garden, Danforth Center, and more. Many of us in different labs, departments, and institutions around STL are actively investigating aspects and effects of climate change; this reading group provides a venue for interacting with others in the community. Subject matter within the context of Climate Change will

be chosen each week by a different presenter. Students can join this reading group for 1 credit if they agree to read all papers, actively participate in discussions, find and present one high quality scientific paper on climate change in the field of their choice and moderate the discussion of this paper. The students will be evaluated on their participation, their understanding of the issues, and their presentation. Credit 1 unit.

Typical periods offered: Spring

BBS 5850 Seminar in Floristic Taxonomy

This weekly seminar provides an introduction to/overview of Plants, each semester progressively covering orders and families in a sequence derived from the Angiosperm Phylogeny Website (<http://www.mobot.org/MOBOT/Research/APweb/welcome.html>); in Spring 2015, the seminar will cover several crown orders of the monocots, including grasses and relatives. Weekly presentations include a summary of all relevant information (molecular, chemical, anatomical, embryological, morphological, ecological, geographical, historical/paleontological, etc.) about the plant group under consideration, review of the classification/phylogeny of the group, examination of fresh and/or preserved specimens, and discussion of relationships, human uses, and other relevant aspects of the biology of that group. Credit will be contingent on one (or two) seminar presentation(s) per student, regular attendance and active participation in group discussions.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5866 Communicating Science: Writing for Multiple Audiences

This course introduces strategies for writing effectively and communicating scientific research to a variety of audiences. Students will learn to reduce jargon, explain scientific concepts in common language, write clearly and concisely, and use sentence structure to maximum efficiency. Written assignments emphasize the significance and innovation in scientific research that appeal to broad audiences, including: the general public, students, policy makers, grant reviewers, and journal editors. This course meets biweekly and consists of lectures and small group sessions. You must enroll in both the lecture session (section 1) and a small group (section A, B, C, or D).

Credit 1 unit.

Typical periods offered: Spring

BBS 5867 Career Planning for Biological Scientists

This course will guide you through nationally recognized and evidence-based career exploration curricula. It is intended for DBBS Ph.D. students and bioscience postdocs who want to jump-start career planning and professional skills needed for a broad range of scientific careers. Topics include self-assessment, career exploration, and goal-setting for long-term success. You will work on a team to research the scientific career path of your choice. Each team will study the specific required knowledge, skills, and attributes of their career interest or employment sector. As part of this research project, you will complete a simulated job exercise and network with alumni or local leaders in your chosen field, gaining valuable real-world insights and creating essential professional connections.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5900 Research

Enrolled students will meet in-person with faculty for a minimum of 1 hour per week. Pass/No Pass Only.

Credit 12 units.

Typical periods offered: Fall, Spring, Summer

BBS 5902 Introduction to the Scholarship of Teaching and Learning

In this course, advanced graduate students and postdocs in STEM will 1) learn the fundamentals of the Scholarship of Teaching and Learning (SoTL)-which is the practice of developing, reflecting on, and evaluating teaching methods to improve student learning, 2) Develop a working knowledge of SoTL, which draws on research in education, STEM education, and cognitive science, 3) Understand how SoTL can lead to the dissemination of new knowledge to a broad audience of educators through publication and presentations., and 4) Develop the central elements of a SoTL project. These elements include articulating questions about classroom teaching that can be addressed in a SoTL research project; developing working hypotheses in response to the questions; designing an evaluative plan, including specific research methods, the type of data to be collected, and how the data will be analyzed in relation to the hypotheses; identifying and understanding necessary procedures to obtain IRB approval for the research.

Credit 1 unit.

Typical periods offered: Spring

BBS 5910 Nano Topics in Biology and Biomedical Sciences

This course will expose students to advanced topics, methods, and skills in biomedical sciences. The course will rapidly fill gaps in student knowledge in areas that are relevant to their research and or professional development. Each section of the course will be offered independently, sometimes in coordination with existing journal clubs and other seminars. Some sections will focus on technique; others will be theoretically or conceptually focused. Each section will be led by a faculty member drawn from DBBS in an area of their expertise. Objectives include deepening students knowledge and skill sets in critical thinking, experimental design, and technical prowess as related to the specific themes of each section.

Credit 0.5-1 units.

Typical periods offered: Fall, Spring

BBS 5911 Seminar in Biology & Biomedical Sciences

These seminars cover the recent literature in various areas not included in other courses, or in more depth than other courses. Credit to be arranged.

Credit 12 units.

Typical periods offered: Spring

BBS 5915 Teaching Practice in Biology & Biomedical Sciences

Students serve as teaching assistants for undergraduate and graduate level courses. Faculty-supervised activities include: lecture preparation and presentation; leading discussion and problem-solving sessions; laboratory instruction.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5922 Entering Mentoring

This course is a series of facilitated discussions aimed at developing and improving mentoring skills for those involved in supervising undergraduate research experiences. It is designed for postdocs and graduate students who are or will be 'bench mentors' for undergraduates doing Bio 500 and/or Summer Research. Participants will receive Entering Mentoring materials, including articles and worksheets to facilitate mentoring interactions with their mentee, plus several resource books relevant to mentoring. They will develop a mentoring philosophy statement, work on specific assignments designed to improve their relationship with their mentee and share their present and past experiences as mentors and mentees. Bench mentors will be eligible for a travel award to help defray expenses for attending a meeting with their mentee, if that student wins one of the HHMI SURF travel awards (4-5 awarded annually) or is otherwise being supported to present at a scientific meeting. Graduate students



and postdocs do NOT need to be mentoring a student at the time of the course; it is open to all with an interest in mentoring now or in the future. Note: The sessions will be held either at the beginning of the day or the end of the day at the Danforth campus. Once registration closes, an email will be sent to those registered to poll for the best days & times.

Credit 1 unit.

Typical periods offered: Fall, Spring

BBS 5923 Foundations in Cancer Biology

This basic cancer biology class is designed to provide a didactic foundation into cancer biology principles. These will include tumor suppressors & oncogenes, DNA damage pathways, protein modifications, tumor progression, metastasis, tumor microenvironment and numerous other topics relevant to cancer biology.

Credit 3 units.

Typical periods offered: Fall

BBS 5928 Experimental Cancer Biology

This basic cancer biology class is meant to coincide with the Foundation course. Topics will be discussed in parallel with Foundation course topics but from the perspective of the laboratory experimentalist. Experimental details will provide the basis for understanding how to ask and answer important questions in the cancer biology laboratory.

Credit 3 units.

Typical periods offered: Fall

BBS 5940 Foundations in Cancer Biology and Experimental Cancer Biology

This advanced course will teach the clinical perspective of cancer biology using topics from oncology, radiation biology, radiology, pathology, immunology and surgery. Students will learn to write a grant proposal that includes a clinical trial element while also shadowing physicians in a real cancer clinical setting.

Credit 3 units.

Typical periods offered: Spring

BBS 5989 Advanced Topics in Neuroscience

This course will expose upper-level and postdoctoral students to advanced topics and methods in neuroscience. The course will rapidly fill gaps in student knowledge in areas that may be relevant to new directions in thesis work or interest areas. Each section of the course will be offered asynchronously, sometimes in coordination with existing journal clubs and other seminars. Each section will meet for two hours per week for three weeks. Sections may start with a didactic component or a review paper, but they will quickly delve into the discussion of primary papers curated by faculty and covering a focused topic. It is expected that papers will cover both historical and current contexts. Some sections will focus on technique; others will be conceptually focused. Each section will be led by a faculty member drawn from the Neuroscience program in an area of their expertise. Objectives include deepening critical thinking, statistical knowledge, experimental design, and technical prowess.

Credit 0.5-1 units.

Typical periods offered: Fall, Spring

BBS 5999 Independent Work

This course is designed for individual students wishing to explore indepth specialized areas of literature or technology with one or more faculty members. Credit will vary with the amount of work and discussion, but cannot be more than 3 credits.

Credit 3 units.

Typical periods offered: Fall, Spring

BBS 9000 Full-Time Graduate Research/Study

Full-Time Graduate Research/Study

Credit 0 units.

Typical periods offered: Fall, Spring, Summer

BBS 9001 Full-Time Graduate Study in Absentia

Full-Time Graduate Study in Absentia

Credit 0 units.

Typical periods offered: Fall, Spring, Summer

BBS 9002 Full-Time Graduate Study Extension

Full-Time Graduate Study Extension

Credit 0 units.

Typical periods offered: Fall, Spring, Summer

Policies

The Vagelos Division of Biology & Biomedical Sciences has more than 700 students with access to over 700 faculty mentors with whom they may perform their dissertation work. This unparalleled flexibility results from the joint governance of DBBS by the Washington University School of Medicine and the School of Arts & Sciences — a 50-year-old model that fosters the most impactful science executed at the boundaries of fields, programs, disciplines, schools and departments. A hallmark of DBBS is our commitment to interdisciplinary collaboration. By transcending traditional academic boundaries, our programs consistently earn top-tier national and international rankings.

In this interdisciplinary environment, graduate students are governed by policies and guidelines established by the university, the School of Medicine, and DBBS. The policies identified here and elsewhere in this *Bulletin* are not to be considered a complete list. However, every attempt has been made to identify the location of those policies that affect most or all students in DBBS.

The University Policies (p. 17) page in this *Bulletin* outlines regulations for both graduate and undergraduate students. For further details, please consult the Office of the University Registrar website and the University Policies page of the WashU website. Graduate students are encouraged to review the specific policy categories relevant to their degree programs.

All DBBS students must follow the University PhD Policies & Requirements (p. 31) as set forth by the Provost's Office.

Degrees in DBBS are conferred by the School of Medicine; hence, students must follow the applicable policies as set forth by the school, including the relevant PhD Program Policies & Guidelines.

DBBS students can reference the DBBS Student Handbook for student guidelines across all Division programs.

Division of Computational & Data Sciences

The Division of Computational & Data Sciences (DCDS) at Washington University in St. Louis trains students interested in problems from across a range of disciplines that share a common reliance on data and computing.

The introduction of now-standard tools from statistical analysis and hypothesis testing transformed the practice of natural and social science in the mid-20th century. Emerging tools from computational and data science have the potential to bring about an even larger transformation of scientific practice, especially in the social sciences. The questions raised by data generated by and about human behavior are engaging and profound. However, many if not most of these questions can only be tackled using a multidisciplinary approach that combines a deep knowledge of the capabilities and operation of data science techniques with the domain expertise needed to apply them effectively to the problems under consideration.

Doctoral students in Computational & Data Sciences receive strong methodological training in modern computational and statistical methods, and they also acquire expertise in a particular social science application area.

The program is inherently interdisciplinary and brings together leading experts from across the university who are using data to solve some of the greatest challenges that our world faces today. Faculty include both data and computing experts as well as domain experts from different application areas.

Faculty

Eunhye Ahn

Assistant Professor, Brown School
PhD, University of Southern California

Ruopeng An

Assistant Professor, Brown School
PhD, Pardee RAND Graduate School

Dennis Barbour

Associate Professor, Biomedical Engineering
MD, Johns Hopkins University
PhD, Johns Hopkins University

Deanna Barch

Professor and Chair, Psychological & Brain Sciences
PhD, University of Illinois

Janine Bijsterbosch

Assistant Professor, Radiology
PhD, University of Sheffield

Ryan Bogdan

Associate Professor, Psychological & Brain Sciences
PhD, Harvard University

Todd Braver

Professor, Psychological & Brain Sciences, Radiology, and Neuroscience
PhD, Carnegie Mellon University

Michael Brent

Henry Edwin Sever Professor of Engineering, Computer Science & Engineering
PhD, Massachusetts Institute of Technology

Derek Brown

Associate Professor, Brown School
PhD, Duke University

Sheretta Butler-Barnes

Associate Professor, Brown School
PhD, Wayne State University

David Carter

Associate Professor, Political Science
PhD, University of Rochester

Yixin Chen

Professor, Computer Science & Engineering
PhD, University of Illinois

Dino Christenson

Associate Professor, Political Science
PhD, Ohio State University

Brett Drake

Professor, Brown School
PhD, University of California, Los Angeles

Ted Enamorado

Assistant Professor, Political Science
PhD, Princeton University

Randi Foraker

Associate Professor of Public Health, Brown School
PhD, The University of North Carolina at Chapel Hill

Patrick Fowler

Track Chair, Social Work & Public Health
Associate Professor, Brown School
PhD, Wayne State University

Roman Garnett

Assistant Professor, Computer Science & Engineering
PhD, University of Oxford

Aimilia Gastounioti

Assistant Professor, Radiology
PhD, National Technical University of Athens

Chris Gill

Professor, Computer Science & Engineering
DSc, Washington University in St. Louis

Brian Gordon

Assistant Professor, Radiology
PhD, University of Illinois

Roch Guérin

Professor and Chair, Computer Science & Engineering
PhD, California Institute of Technology

Shenyang Guo

Professor, Brown School
PhD, University of Michigan–Ann Arbor

Ross Hammond

Associate Professor, Brown School
PhD, University of Michigan

Jenine Harris

Associate Professor, Brown School
PhD, Saint Louis University

Chien-Ju Ho

Assistant Professor, Computer Science & Engineering
PhD, University of California, Los Angeles

Josh Jackson

Associate Professor, Psychological & Brain Sciences
PhD, University of Illinois Urbana-Champaign

Nathan Jacobs

Professor, Computer Science & Engineering
PhD, Washington University in St. Louis

Kim Johnson

Associate Professor, Brown School
PhD, University of Minnesota

Melissa Jonson-Reid

Professor, Brown School
PhD, University of California, Berkeley

Brendan Juba

Assistant Professor, Computer Science & Engineering
PhD, Massachusetts Institute of Technology

Thomas Kannampallil

Assistant Professor, Anesthesiology
PhD, University of Illinois

Caitlin Kelleher

Associate Professor, Computer Science & Engineering
PhD, Carnegie Mellon University

Wouter Kool

Assistant Professor, Psychological & Brain Sciences
PhD, Princeton University

Matt Kreuter

Professor, Social Work & Public Health
PhD, The University of North Carolina at Chapel Hill

Albert Lai

Associate Professor and Deputy Director, Institute for Informatics
Associate Professor, Computer Science & Engineering
PhD, Columbia University

Calvin Lai

Assistant Professor, Psychological & Brain Sciences
PhD, University of Virginia

Matthew Lew

Assistant Professor, Electrical & Systems Engineering
PhD, Stanford University

Jr-Shin Li

Professor, Electrical & Systems Engineering
PhD, Harvard University

Fangqiong Ling

Assistant Professor, Energy, Environmental & Chemical Engineering
PhD, University of Illinois Urbana-Champaign

Chenyang Lu

Professor, Computer Science & Engineering
PhD, University of Virginia

Christopher Lucas

Assistant Professor, Political Science
PhD, Harvard University

Doug Luke

Professor, Brown School
PhD, University of Illinois

Phillip Marotta

Assistant Professor, Brown School
PhD, Columbia University

Andrew D. Martin

Professor, Political Science and Law
Chancellor, Washington University in St. Louis
PhD, Washington University in St. Louis

Timothy McBride

Professor, Brown School
PhD, University of Wisconsin–Madison

Jacob Montgomery

Track Chair, Political Science
Associate Professor, Political Science
PhD, Duke University

William Nomikos

Assistant Professor, Political Science
PhD, Yale University

Alvitta Ottley

Assistant Professor, Computer Science & Engineering
PhD, Tufts University

Neal Patwari

Professor, Electrical & Systems Engineering
Professor, Computer Science & Engineering
PhD, University of Michigan

Philip R.O. Payne

Professor and Director, Institute for Informatics
Professor, Computer Science & Engineering
PhD, Columbia University

Netanel Raviv

Assistant Professor, Computer Science & Engineering
PhD, Technion – Israel Institute of Technology

Zachariah Reagh

Assistant Professor, Psychological & Brain Sciences
PhD, University of California, Irvine

Andrew Reeves

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PhD, Harvard University

Guillermo Rosas

Associate Professor, Political Science
PhD, Duke University

Betsy Sinclair

Professor, Political Science
PhD, California Institute of Technology

Bruno Sinopoli

Professor and Chair, Electrical & Systems Engineering
PhD, University of California, Berkeley

Aristeidis Sotiras

Assistant Professor, Radiology
PhD, École Centrale Paris

Fred Ssewamala

Associate Dean for Transdisciplinary Faculty Research, Brown School
PhD, Washington University in St. Louis

Joe Steensma

Professor of Practice, Brown School
EdD, Indiana Wesleyan University

Joshua Swamidass

Associate Professor, Pathology & Immunology
Associate Professor, Biomedical Engineering
MD, University of California, Irvine
PhD, University of California, Irvine

Jessie Sun

Assistant Professor, Psychological & Brain Sciences
PhD, University of California, Davis

Yevgeniy Vorobeychik

Associate Professor, Computer Science & Engineering
PhD, University of Michigan

Chenguang Wang

Assistant Professor, Computer Science & Engineering
PhD, Peking University

Yong Wang

Associate Professor, Electrical & Systems Engineering

Emily Willroth

Assistant Professor of Psychological & Brain Sciences
PhD, University of California, Berkeley

William Yeoh

Track Chair, Computational Methodologies
Associate Professor, Computer Science & Engineering
PhD, University of Southern California

Jeffrey Zacks

Track Chair, Psychological & Brain Sciences
Professor and Associate Chair, Psychological & Brain Sciences
PhD, Stanford University

Shen Zeng

Assistant Professor, Electrical & Systems Engineering
PhD, University of Stuttgart

Ning Zhang

Assistant Professor, Computer Science & Engineering
PhD, Virginia Polytechnic Institute and State University

Xuan Zhang

Assistant Professor, Electrical & Systems Engineering
PhD, Cornell University

Degree Requirements

Upon joining the PhD program, each student is assigned an initial advisor from the DCDS faculty. This advisor meets with the student to assess their background and to advise them on course selection.

All students complete a common core curriculum as well as a domain depth requirement in a social science area. The focus of the first year is on acquiring a common set of tools and an understanding of the ranges and types of problems students may work on as they progress through the program. The entire incoming cohort takes a unique two-semester seminar sequence solely for DCDS students, which includes both general topics and a series of data-driven dives into the types of research questions that may be encountered in each of the domain areas.

Curriculum

Required Core Courses

Please refer to the DCDS Doctoral Student Handbook for the most up-to-date core course requirements.

Domain Depth Tracks

Students will choose one of four focus tracks: Political Science, Psychological & Brain Sciences, Social Work & Public Health, or Computational Methodologies. Please refer to the DCDS Doctoral Student Handbook for the most up-to-date domain depth track requirements.

Further Requirements

Additional requirements for this program are as follows:

- A minimum of 72 credit units beyond the bachelor's level, with a minimum of 37 being course credits (including the core curriculum)
- A minimum of 24 credit units of doctoral dissertation research
- Students must maintain a cumulative average grade of B (3.0 grade-point average) for all 72 credit units.
- Required courses must be completed with no more than one grade below a B–.
- Up to 24 graduate credit units may be transferred with the approval of the Graduate Studies Committee, which is chaired by the director of graduate studies.

In addition to fulfilling the course and research credit requirements, students must do the following:

- Pass a qualifying exam.
- Successfully defend a thesis proposal.
- Present and successfully defend a dissertation.
- Complete a teaching requirement consisting of two semesters of mentored teaching experience.

Institute of Materials Science & Engineering

The Institute of Materials Science & Engineering (IMSE) at Washington University in St. Louis offers a unique, interdisciplinary PhD in Materials Science & Engineering that crosses traditional departmental and school boundaries. The field of materials science and engineering focuses on the study, development and application of new materials with desirable properties, with the goal of enabling new products and superior performance regimes. Disciplines in the physical sciences (e.g., chemistry, physics) play a central role in developing the fundamental knowledge that is needed to design materials for a variety of engineering applications (e.g., mechanical engineering, electrical engineering, biomedical engineering). Building on training that spans from fundamental to applied sciences, materials scientists and engineers integrate this fundamental knowledge to develop new materials and match them with appropriate technological needs.

The IMSE is well positioned to address the needs of a student seeking a truly interdisciplinary experience. The IMSE brings together a diverse group of faculty from departments in Arts & Sciences, the McKelvey School of Engineering, and the School of Medicine. The IMSE also oversees shared research and instrument facilities, develops partnerships with industry and national laboratories, and facilitates outreach activities.

Current focused areas of research and advanced graduate education within the IMSE include the following:

- Artificial intelligence in materials discovery and design
- Biomedical, bio-derived, and bio-inspired materials
- Materials for energy and environmental technologies
- Quantum and photonic materials and devices

Faculty

Director

Katharine M. Flores

Christopher I. Byrnes Professor, Mechanical Engineering & Materials Science
PhD, Stanford University

Professor Flores' primary research interest is the mechanical behavior of high-performance structural materials, with particular emphasis on understanding structure-processing-property relationships in bulk metallic glasses and their composites.

Professors

Jianjun Guan

Professor, Mechanical Engineering & Materials Science
PhD, Zhejiang University

Professor Guan's research interests are in biomimetic biomaterials synthesis and scaffold fabrication; bioinspired modification of biomaterials; injectable and highly flexible hydrogels; bioimageable polymers for MRI and EPR imaging and oxygen sensing; mathematical modeling of scaffold structural and mechanical properties; stem cell differentiation; neural stem cell transplantation for brain tissue regeneration; and bone and cardiovascular tissue engineering.

Marcus Foston

Professor, Energy, Environmental & Chemical Engineering
PhD, Georgia Institute of Technology

Professor Foston's research program seeks to develop innovative and novel routes to exploit and utilize lignocellulosic biomass by taking advantage of materials involved in industries such as agriculture, paper making, and forestry products.

Erik Henriksen

Professor, Physics
PhD, Columbia University

Professor Henriksen's lab research is centered on the properties of electrons confined to two dimensions. This remarkable system has yielded a tremendous amount of interesting and important physics over the past several decades, from the integer and fractional quantum Hall effects to the groundbreaking discoveries of graphene and other atomically thin crystals and especially to the recent realization of the topological nature of the electronic structure of a surprising number of materials both novel and familiar.

Song Hu

Professor, Biomedical Engineering
PhD, Washington University in St. Louis

Professor Hu's research focuses on the development of cutting-edge optical and photoacoustic technologies for high-resolution structural, functional, metabolic, and molecular imaging in vivo and their applications in neurovascular disorders, cardiovascular diseases, regenerative medicine, and cancer.

Vijay Ramani

Roma B. & Raymond H. Wittcoff Distinguished University Professor of Environment & Energy
PhD, University of Connecticut

Vijay Ramani's research interests lie at the confluence of electrochemical engineering, materials science and renewable and sustainable energy technologies. The National Science Foundation, Office of Naval Research, ARPA-E, and Department of Energy have funded his research, with mechanisms including an NSF CAREER award (2009) and an ONR Young Investigator Award (ONR-YIP; 2010).

Srikanth Singamaneni

The Lilyan & E. Lisle Hughes Professor, Mechanical Engineering & Materials Science
PhD, Georgia Institute of Technology

Professor Singamaneni's research interests include plasmonic engineering in nanomedicine (in vitro biosensing for point-of-care diagnostics, molecular bioimaging, nanotherapeutics); photovoltaics (plasmonically enhanced photovoltaic devices); surface-enhanced Raman scattering (SERS)-based chemical sensors, with particular emphasis on the design and fabrication of unconventional and highly efficient SERS substrates; hierarchical organic/inorganic nanohybrids as multifunctional materials; bioinspired structural and functional materials; polymer surfaces and interfaces; responsive and adaptive materials and scanning probe microscopy; and surface force spectroscopy of soft and biological materials.

Fuzhong Zhang

Professor, Energy, Environmental & Chemical Engineering
PhD, University of Toronto

Professor Zhang's research focuses on developing synthetic biology tools and systems for the sustainable production of structurally defined chemicals and high-performance materials. Current research projects include the following: (1) engineering microbial metabolic dynamics and heterogeneity; (2) engineering metabolic pathways to produce structure-defined biofuels and chemicals; and (3) developing microbial factories to produce high-performance materials.

Associate Professors

Peng Bai

Associate Professor, Energy, Environmental & Chemical Engineering
PhD, Tsinghua University, Beijing

Professor Bai's research focuses on the development of next-generation batteries. Knowledge and tools developed in the Bai Group also apply to and benefit the design of other electrochemical energy systems, like supercapacitors and fuel cells.

Mikhail Y. Berezin

Associate Professor, Radiology
PhD, Moscow Institute of Oil and Gas/Institute of Organic Chemistry

Dr. Berezin's lab focuses on the development of novel optically active probes ranging from small molecules to nanoparticles and the development of optical instrumentation for spectroscopy and imaging using knowledge of excited states. The lab's research interest lies in the investigation and application of molecular excited states and their reactions for medical imaging and clinical treatment.

Nathaniel Huebsch

Associate Professor, Biomedical Engineering
PhD, Harvard University

Professor Huebsch's research focus is in basic and translational stem cell mechanobiology, with specific focus on hydrogels to control cell-mediated tissue repair and three-dimensional, iPSC-based heart-in-a-dish models to study the influence of mechanical loading and genetics on arrhythmia and contractility.

Matthew Lew

Associate Professor, Electrical & Systems Engineering
PhD, Stanford University

Professor Lew and his students build advanced imaging systems to study biological and chemical systems at the nanoscale, leveraging innovations in applied optics, signal and image processing, design optimization, and physical chemistry. Their advanced nanoscopes (microscopes with nanometer resolution) visualize the activity of individual molecular machines inside and outside living cells. Examples of new technologies developed in the Lew Lab include (1) using tiny fluorescent molecules as sensors that can detect amyloid proteins; (2) designing new "lenses" to create imaging systems that can visualize how molecules move and tumble; and (3) new imaging software that minimizes artifacts in super-resolution images.

Xianglin Li

Associate Professor, Mechanical Engineering & Materials Science
PhD, University of Connecticut

Professor Li's research interests are in batteries and fuel cells, including direct methanol fuel cells, lithium-oxygen batteries and battery thermal management; transport phenomena in porous media; greenhouse gas emissions and full fuel cycle analysis of fossil fuels; and life cycle assessment and economic analysis of advanced energy techniques, among others.

Mark Meacham

Associate Professor, Mechanical Engineering & Materials Science
PhD, Georgia Institute of Technology

Professor Meacham's research interests include microfluidics, micro-electromechanical systems (MEMS) and associated transport phenomena, with application to design, development and testing of novel energy systems and life sciences tools, from scalable micro-/nanotechnologies for improved heat and mass exchangers to MEMS-based tools for manipulation and investigation of cellular processes.

He is also interested in the behavior of jets and/or droplets of complex fluids during ejection from microscopic orifices, which is critical to applications as disparate as biological sample preparation and additive manufacturing.

Rohan Mishra

Associate Professor, Mechanical Engineering & Materials Science
PhD, Ohio State University

Professor Mishra's research interest is to develop quantitative structure-property correlations in materials starting from the atomic scale. To develop such correlations, his group synergistically combines electronic structure calculations with atomic-resolution electron microscope imaging and spectroscopy. The end goal is the rational design of materials with properties tailored for electronic, optical, magnetic and energy applications. Current research topics include perovskite materials for photovoltaic and optoelectronic applications, novel electrocatalysts, oxidizers, and wide-bandgap semiconductors.

Jai Rudra

Associate Professor, Biomedical Engineering
PhD, Louisiana Tech University

Jai Rudra's lab is interested in the development of nanoscale biomaterials such as nanofibers, nanoparticles, virus-like particles, and hydrogels for engaging the immune system to induce protective antibody and cell-mediated immune responses against diseases such as tuberculosis, melanoma, and flavivirus infections (i.e., West Nile and Zika). He is also investigating the development of vaccines against drugs of addiction such as cocaine.

Chuan Wang

Associate Professor, Electrical & Systems Engineering
PhD, University of Southern California

Professor Wang's research focus is on two-dimensional semiconductor nanoelectronics and optoelectronics, stretchable electronics, printed electronics, and sensors and actuators.

Patricia Weisensee

Associate Professor, Mechanical Engineering & Materials Science
PhD, University of Illinois at Urbana-Champaign

Professor Weisensee's work focuses on understanding the interplay of fluid dynamics, heat transfer, and liquid-solid interactions of droplets and other multi-phase systems. Practical applications of interest are phase change heat transfer for thermal management, thermal storage, water harvesting, metallic additive manufacturing, and droplet interactions with biological and natural systems.

Assistant Professors

Sang-Hoon Bae

Assistant Professor, Mechanical Engineering & Materials Science
PhD, University of California, Los Angeles

Professor Bae's research group focuses on tackling the challenges in materials science with thermodynamics, kinetics, and solid-state physics.

Matthew Bersi**Christopher Cooper**

Assistant Professor, Energy, Environmental & Chemical Engineering
PhD, Stanford University

Christopher Cooper's research at WashU focuses on using dynamic polymers to create responsive, soft materials for applications in energy storage, environmental sustainability, and human health. Through advanced synthesis and characterization, his research group designs polymers with distinct molecular designs and reversible bonds for applications including wearable or implantable electronic devices, recyclable underwater adhesives, soft actuators, and upcycling of industrial plastics. Cooper has published more than 15 peer-reviewed journal articles and given numerous conference presentations and invited talks.

Francisco Lagunas Vargas**Mark Lawrence**

Assistant Professor, Electrical & Systems Engineering
PhD University of Birmingham

Professor Lawrence and his lab are harnessing breakthroughs in nanoscale engineering to push the limits of light-based technologies, targeting applications ranging from all-optical computing and quantum communication to metrology and biosensing.

Kelly Powderly

Assistant Professor of Chemistry
PhD, Princeton University

The Powderly Group seeks to develop and utilize new synthetic pathways to discover extended solids with magnetic, electronic, and non-trivial topological properties of interest in quantum information science and to explore new fundamental bonding in materials.

Sheng Ran

Assistant Professor, Physics
PhD, Iowa State University

Professor Ran's research aims to realize and understand exotic states of quantum materials using combined techniques of bulk crystal synthesis, electric and thermal transport measurements under extreme temperature, pressure and magnetic field conditions, and neutron and high-energy X-ray scattering.

Xi Wang

Assistant Professor, Physics
PhD, Florida State University

Xi Wang's lab utilizes cutting-edge magneto optical and optoelectronic microscopy and spectroscopy to probe and control excitons, electrons, phonons, magnons, and so on in quantum materials for applications in quantum simulation and quantum communication.

Chong Zu

Assistant Professor, Physics
PhD, Tsinghua University

Professor Zu's research interests lie at the interface between atomic, molecular, and optical physics; condensed matter physics; and quantum information.

Degree Requirements

To earn a PhD degree, students must complete the requirements of the McKelvey School of Engineering, along with program-specific requirements. Courses include the following:

- Four IMSE Core Courses (12 units)

Code	Title	Units
MEMS 5610	Quantitative Materials Science & Engineering	3
MEMS 5619	Thermodynamics of Materials *	3
<i>Hard Materials Track:</i>		
MEMS 5620	Kinetics of Materials	3
CHEM 5620	Solid-State and Materials Chemistry *	3
	or PHYSICS 5072 Solid State Physics	
<i>Soft Materials Track:</i>		
MEMS 5608	Introduction to Polymer Science and Engineering	3
MEMS 5614	Polymeric Materials Synthesis and Modification	3

* EECE 5020 Advanced Thermodynamics in EECE may be taken instead with permission of the Director of Graduate Studies.

- Three courses (9 units) from a preapproved list of Materials Science & Engineering electives
- IMSE 8991 IMSE First-Year Research Experience (6 units)
- A minimum of three graduate-level technical elective courses (9 units) in mathematics or any science or engineering department, to reach a total of at least 36 academic credit units
 - A maximum of 3 units of IMSE Journal Club will be permitted toward this requirement.
 - Any 4000-level courses not included on the preapproved list of Materials Science & Engineering electives must be approved by the Graduate Studies Committee.
- A maximum of 12 units of 4000-level courses may be applied toward the required 36 academic credit units. Undergraduate-only courses (below the 4000 level) are generally not permitted and may not be used to fulfill this requirement.
- IMSE 8997 IMSE Graduate Seminar every semester of full-time enrollment
- 18 to 36 units of IMSE 8998 Doctoral Research (Students must identify an IMSE faculty member willing and able to support their dissertation research on a materials-related topic.)
- Students must maintain a grade point average of at least 3.0 for all graded courses and have no more than one grade of B– or below in a core course or a Materials Science & Engineering elective.

Additional program requirements include the following:

- Pass the IMSE Qualifying Examination (oral and written components).
- Identify an IMSE graduate program faculty member willing and able to support the student's dissertation research on a materials-related topic.
- Maintain satisfactory research progress on a topic in materials science and engineering, as determined by the dissertation advisor and the mentoring committee.
- Successfully complete research ethics training by the end of the third semester.
- Successfully complete MTE requirements by the end of the third year.
- Successfully complete the dissertation proposal and presentation, with approval from the dissertation examination committee.
- Successfully complete and defend a PhD dissertation, with final approval from the dissertation examination committee.

Failure to meet these requirements will result in dismissal from the program.

Recommended Course Plan

Year 1

Fall Semester

- IMSE 8997 IMSE Graduate Seminar
- IMSE 8991 IMSE First-Year Research Experience
- MEMS 5610 Quantitative Materials Science & Engineering
- MEMS 5619 Thermodynamics of Materials
 - IMSE will allow EECE 5020 Advanced Thermodynamics in EECE in place of MEMS 5619 Thermodynamics of Materials with permission of the Director of Graduate Studies.
- Hard Materials Track: CHEM 5620 Solid-State and Materials Chemistry
 - An elective may be chosen if the student is taking PHYSICS 5072 Solid State Physics in the spring.
- Soft Materials Track: MEMS 5608 Introduction to Polymer Science and Engineering

Spring Semester

- Begin dissertation research
- IMSE 8997 IMSE Graduate Seminar
- IMSE 8991 IMSE First-Year Research Experience
- Hard Materials Track: MEMS 5620 Kinetics of Materials
- Soft Materials Track: MEMS 5614 Polymeric Materials Synthesis and Modification
- Elective

Summer

- Prepare for IMSE Qualifying Examination (typically taken in August):
 - Written document and oral presentation on research rotation
 - Oral examination on fundamentals from core courses

Years 2 and Beyond

- Complete remaining electives (discuss with dissertation advisor)
- IMSE 8997 IMSE Graduate Seminar
- IMSE 8998 Doctoral Research
- Teaching requirements (to be completed by the end of the third year):
 - Attend two McKelvey preparatory engagement workshops.
 - AI two times at 10 MER units for a total of 20 units.
- Regular meetings (at least once per year) with the mentoring committee
- Dissertation proposal and presentation (fifth semester)
- Dissertation and oral defense

Mentored Experience Implementation Plan

As part of their degree requirements, PhD students must complete a program-defined Mentored Experience Requirement (MER) as per these guidelines. The Mentored Experience Implementation Plan (MEIP) is the written articulation of a program-defined degree requirement for PhD students to engage in mentored teaching activities and/or mentored professional activities, collectively referred to as the *MER*.

Mentored Experience Requirement (MER)

Philosophy of Teaching

Materials scientists and engineers work at the interface between the fundamental physical sciences and application-oriented disciplines. As such, they often need to translate between underlying physical principles governing the performance of a material and the design requirements of a system or device. This translation is inherently two-way; the emergent properties of novel materials enable new, potentially transformative applications, and new devices often require materials with unique (and challenging) property profiles. To facilitate this two-way translation, our PhD graduates must be able to communicate both fundamental and applied concepts to a variety of audiences, including supervisors, subordinates, clients, and co-workers, whose familiarity with the MSE field may range from novice

to expert. Moreover, mentored teaching experiences instill a sense of responsibility, professionalism, and ethical conduct, preparing students to navigate the complex landscape of academia, industry, government, or other research-oriented sectors with confidence and integrity.

Preparatory Engagement

Preparatory Engagement activities are those that represent an introduction to the foundational skills associated with teaching or communication. Pedagogical preparation engagement activities are normally completed before students are permitted to engage in assisting or teaching in a classroom.

Two preparatory workshops are required:

1. McKelvey Teaching Orientation (Canvas Course)
2. McKelvey Teaching Workshop (Canvas Course)

Mentored Teaching Experiences (MTEs)

Assistant in Instruction (AI)

An Assistant in Instruction (AI) is a PhD student who is directly engaged in the organization, instruction, and/or support of a semester-long course *primarily taught by a faculty member*. An AI receives mentorship from a faculty member related to best practices in classroom engagement, instruction in the field, interpersonal engagement, and other relevant skills. Students and mentors complete a mentorship plan prior to the start of each AI experience. To complete each AI assignment and to ensure that it applies toward their degree requirements, students must register for the appropriate course number for each semester of engagement. Refer to the "Required Pathways for Completion" section below for course numbers and details.

Students will AI two times at 10 MER units for a total of 20 units. Students work with their graduate supervisor on the timing and content of those assignments.

Required Pathways for Completion

Students work with their faculty mentor and their Director of Graduate Studies to plan how and when they will complete their MER. Students register during the normal registration period for courses in accordance with one of these approved pathways.

- Preparatory Engagement

EGS 8010	Take two times
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Interdisciplinary Opportunities

Washington University offers courses through interdisciplinary programs that include studies in a variety of disciplines that cross traditional academic boundaries and support academic areas outside of the schools.

- **Interdisciplinary Courses**

Graduate students can speak with their advisors with regard to enrolling in individual courses available outside of their school that may advance their research or professional goals. An internal tuition agreement valid across the university's graduate and professional schools enables interdisciplinary study by allowing enrollment in classes outside of the student's home school. Many undergraduate and graduate courses are available for graduate student enrollment, subject to the following eligibility guidelines:

- The student must be enrolled full-time in a graduate degree program and have the approval of their faculty advisor or administrative officer to take a course outside of their home school.
 - Courses will be open to students outside of the discipline only if those students have met the required prerequisites and have the approval of both their department/advisor and the course instructor.
 - Finally, courses and students in part-time or "continuing" programs, including WashU Continuing & Professional Studies, are not part of this agreement. Courses that require individualized instruction and/or additional fees (e.g., independent studies, individual music lessons) are also excluded.
- **Teaching Citation — Center for Teaching and Learning**
The Teaching Citation is a professional-development program open to Washington University graduate students. The purpose of the program is to provide formalized pedagogical training to help graduate students prepare for careers that involve teaching. Graduate students who complete the program will participate in a learning community in which they will 1) develop knowledge of effective pedagogy, including evidence-based teaching methods, by completing one Foundations in Teaching and five advanced-level CTL workshops, 2) gain expertise with varied teaching methods by documenting three qualifying teaching experiences, and 3) develop, reflect on, and refine on their teaching approach by writing an engaging teaching philosophy statement. Documenting one's teaching experience includes demonstrating that the required number of teaching hours have been met, attaining faculty or CTL observation and student feedback on one's teaching activities, and writing a self-reflection. The qualifying teaching experiences that can be counted toward the Teaching Citation include, for example, include leading a weekly discussion or recitation subsection, leading regular review- or help-sessions, presenting course lectures, teaching a course independently, and mentoring a student in a research project. Teaching experiences must be approved by CTL staff.

- A limited opportunity for some Washington University students to enroll in courses at Saint Louis University and the University of Missouri–St. Louis is available through the Inter-University Exchange Program (p. 150).
- The Skandalaris Center (p. 151) offers cocurricular programming and practical, hands-on training and funding opportunities to students and faculty in all disciplines and schools.
- The McDonnell International Scholars Academy (p. 153) is an endowed fellowship program that offers generous financial support toward graduate and professional degree studies at Washington University in St. Louis.

Inter-University Exchange Program

The Inter-University Exchange (IE) program between Washington University, Saint Louis University (SLU), and the University of Missouri–St. Louis (UMSL) began in 1976 as an exchange agreement encouraging greater inter-institutional cooperation at the graduate level. Over time, this program has evolved to include undergraduate education. The basic provisions of the original agreement are still in place today, and participation continues to be at the discretion of each academic department or unit.

At Washington University, there are several schools that *do not participate* in this program (i.e., degree-seeking students in these schools are not eligible to participate in the IE program, and courses offered in these schools are not open to SLU and UMSL students attending Washington University through the IE program). They are the School of Law, the School of Medicine, the McKelvey School of Engineering, and the School of Continuing & Professional Studies. The Washington University schools that are open to participation in the IE program may have specific limitations or requirements for participation; details are available in those offices.

The following provisions apply to all coursework taken by Washington University students attending SLU or UMSL through the IE program:

- Such courses can be used for the fulfillment of degree or major requirements. (Students should consult with their dean's office for information about how IE coursework will count toward their grade-point average, units and major requirements.)
- Such courses are not regularly offered at Washington University.
- Registration for such courses requires preliminary approval of the student's major/department advisor, the student's division office or dean, and the academic department of the host university.
- Students at the host institution have first claim on course enrollment (i.e., a desired course at SLU or UMSL may be fully subscribed and unable to accept Washington University students).
- Academic credit earned in such courses will be considered as resident credit, not transfer credit.

- Tuition for such courses will be paid to Washington University at the prevailing Washington University rates; there is no additional tuition cost to the student who enrolls in IE coursework on another campus. However, students are responsible for any and all fees charged by the host school.
- Library privileges attendant on enrolling in a course on a host campus will be made available in the manner prescribed by the host campus.

Instructions

Washington University students must be enrolled full-time to participate in the IE program and have no holds, financial or otherwise, on their academic record at Washington University or at the host institution.

1. The student must complete the IE program application form. Forms are available from the Office of the University Registrar website.
2. The student must provide all information requested in the top portion of the form and indicate the course in which they wish to enroll.
3. The student must obtain the approval signature of the professor teaching the class or the department chair at SLU or UMSL, preferably in person.
4. The student also must obtain the approval signatures of their major advisor at Washington University and the appropriate individual in their dean's office.
5. Completed forms must be submitted to the Office of the University Registrar in the Women's Building a minimum of one week before the start of the term.

Course enrollment is handled administratively by the registrars of the home and host institutions. Washington University students registered for IE coursework will see these courses on their class schedule and academic record with the subject codes SLU and UMSL. Final grades are recorded when received from the host institution. The student does not need to obtain an official transcript from SLU or UMSL to receive academic credit for IE coursework at Washington University.

Contact:	Office of the University Registrar
Phone:	314-935-5959
Email:	registrar@wustl.edu
Website:	http://registrar.wustl.edu/student-records/registration/the-inter-university-exchange-program

Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship

The Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship is the hub of creativity, innovation, and entrepreneurship at Washington University. We believe everyone can be entrepreneurial. Skandalaris provides programming where anyone can explore their creative and entrepreneurial interests, develop an entrepreneurial mindset, and go from ideation to launch.

Mission

The Skandalaris Center fosters and empowers an inclusive community that finds opportunities in problems and transforms ideas into action. We build an ecosystem of education, research, and resources that engages all WashU students, faculty, alumni, and staff as entrepreneurial leaders and collaborators.

Who We Serve

We work with the best and brightest at WashU — the change-makers, thought leaders, and visionaries — to solve the world's problems and meet local needs through innovation and entrepreneurship. As an interdisciplinary center, our initiatives serve students, faculty, staff, and alumni from all levels and disciplines.

Our Initiatives

We develop programs for WashU entrepreneurs, creatives, innovators, and scholars. Our commitment to interdisciplinary innovation and entrepreneurship is motivated by the following beliefs:

- *Everyone can be creative.* We provide hands-on experiences and the creative means to solve problems.
- *Innovation is the backbone of entrepreneurship.* Our opportunities are designed to develop and share new ideas while connecting with other WashU entrepreneurs and innovators.
- *Good ideas are one opportunity away from success.* Our programs are created to help WashU entrepreneurs and innovators access the resources they need to take their ideas to the next level.
- *Knowledge and skills are key to innovation and entrepreneurship.* Our Center offers events and opportunities to help our community of WashU entrepreneurs, creatives, and innovators learn the ins and outs of innovation and entrepreneurship.

Programs and Resources

- **Experts on Call**

This program provides an opportunity for the WashU community to connect with experts in the Skandalaris Center or remotely, free of charge.

- **Honors in Innovation & Entrepreneurship**

Students who have shown exemplary involvement in innovation and entrepreneurship during their time at Washington University are recognized through this program. Honors are earned by accumulating points through a combination of curricular and cocurricular activities.

- **In-Residence Program**

This program provides WashU students, faculty, staff, and alumni with the opportunity to learn from and work with professionals with extensive industry experience.

- **PhD Citation in Entrepreneurship**

This program provides opportunities for PhD students who are interested in developing skills and experiences in the areas of entrepreneurship and innovation.

- **Pivot 314 Fellowship**

The Pivot 314 Fellowship is a year-long program presented by the Office of the Provost and the Skandalaris Center for Interdisciplinary Innovation and Entrepreneurship. Pivot 314 offers graduate students curated programming focused on professional development and on strengthening leadership and communications skills, as well as internship opportunities.

- **Resources**

The Skandalaris Center, Washington University, and external services and resources are available to support innovators and entrepreneurs.

- **Skandalaris Spaces**

Our collaboration space is available for hosting meetings or events. Requests should be made a week in advance.

- **Skandalaris Startup Webinars, Panel Discussions, and Workshops**

These webinars provide an exciting way for alumni to reconnect and share their experiences with entrepreneurship. We also offer free, noncredit workshops designed to encourage creativity, innovation, and entrepreneurship.

- **Startup Venture Promotion**

The Skandalaris Center is happy to help Washington University in St. Louis students, faculty, staff, and alumni with promoting their startup ventures.

- **Student Enterprise Program (StEP)**

StEP provides a unique opportunity for students to own and operate a business on campus that serves the WashU community. Student owners can supplement the valuable business and entrepreneurial skills they learn in the classroom while gaining real-world experience as they manage and lead their own businesses.

- **Student Groups**

There are many organizations that allow students to gain experience and make valuable interdisciplinary connections in the areas of creativity, innovation, and entrepreneurship.

- **Venture Development**

The WashU community is invited to set an appointment with a member of our team for help with ideas and businesses at any stage. We will work with these individuals to brainstorm ideas, strengthen financial models, draft business plans, perfect pitches, and more.

- **Washington University Entrepreneurship Courses**

Courses in entrepreneurship offered across the university are available to students at all levels and in all disciplines.

Competitions

- **IdeaBounce®**

IdeaBounce® is both an online platform and an event for sharing venture ideas and making connections. This is an opportunity for participants to pitch their ideas (no matter how "fresh"), get feedback on them, and make connections. In-person events happen frequently throughout the fall and spring semesters.

- **Skandalaris Venture Competition (SVC)**

The SVC provides expert mentorship to new ventures and startups to ready them for commercializing their ideas, launching, and pitching to investors. Teams will develop materials focused on explaining the ideas that they are working on to a broad audience.

- **Who Can Apply:** Current Washington University students and alumni (within one year of graduation) with an early-stage venture or idea
- **Award:** Up to \$22,500

- **Global Impact Award (GIA)**

The GIA awards WashU-affiliated ventures with inventions, products, ideas, and business models that will have a broad and lasting impact on society.

- **Who Can Apply:** WashU students, postdocs, residents, and alumni who have graduated within the last 10 years
- **Award:** Up to \$50,000

Learn More

Please contact the Skandalaris Center to sign up for our newsletter and for additional information about all programs.

Phone:	314-935-9134
Email:	sc@wustl.edu
Website:	http://skandalaris.wustl.edu



McDonnell International Scholars Academy

The McDonnell International Scholars Academy graduate fellowship program at WashU is dedicated to fostering a dynamic community of scholars chosen based on their ability to emerge as leaders and experts in their fields. The McDonnell Academy offers curated programming that includes a leadership seminar, cohort trips, and presentation skills development. This multifaceted approach cultivates leaders who embrace a global outlook and help drive positive change in their communities and beyond.

The McDonnell Academy provides both financial and programmatic support to enrich the WashU graduate experience. Meaningful participation and engagement are key components of the program. For more information about program benefits, eligibility, and admissions, please visit the Admissions page of the McDonnell International Scholars Academy website.

Website: <https://mcdonnell.wustl.edu/>

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