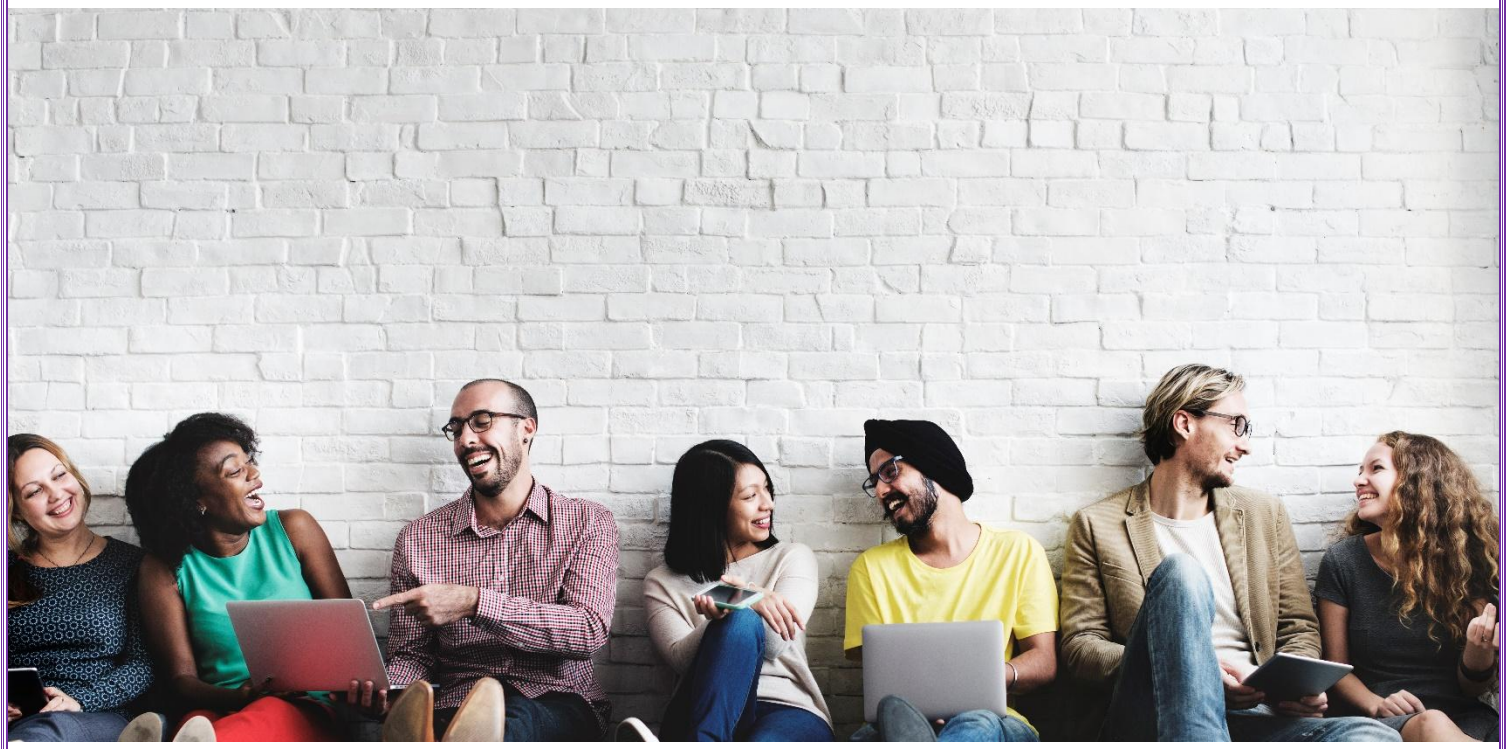
Northwestern University
MS in Biostatistics
Student Handbook
Academic Year 2026-2027



NORTHWESTERN
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Contents

The Program in Public Health reserves the right to change without notice any statement in this publication concerning but not limited to, rules, policies, tuition, fees, curricula, and courses.

➢ Mission

The mission of the Northwestern University (NU) Program in Public Health (PPH) is to prepare future public and population health professionals in an environment of innovative education, research and service that engages our communities and improves health and health equity.

➢ Land Acknowledgement

We recognize and acknowledge that Northwestern University Feinberg School of Medicine sits on the land of multiple Native nations. We acknowledge and honor the original peoples of the Chicagoland area - the Three Fires Confederacy, Potawatomi, Odawa and Ojibwe Nations, as well as other Tribal Nations that know this area as their ancestral homeland, including the Menominee, Ho-Chunk, Miami, Peoria, and Sac and Fox.

These lands were the traditional birthright of Indigenous peoples who were forcibly removed and who have faced two centuries of struggle for survival and identity in the wake of dispossession. We acknowledge the ground on which we stand so that all who come here know that we recognize our responsibilities to the peoples of that land and that we strive to address that history so that it guides our work in the present and the future.

We further acknowledge that this land is the current home to one of the largest urban Native American communities in the United States. Native people are part of Chicago's past, present, and future, and it is our responsibility to acknowledge these Nations and to work with them as we move forward as a more inclusive institution.

Land acknowledgement by the Native American and Indigenous Initiatives.

➢ MS in Biostatistics Program Contacts

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➢ Overview

The Program in Public Health (PPH) began at Northwestern in 1996 and received its first accreditation by the Council on Education for Public Health (CEPH) in 2000. Since its inception, the program has spanned boundaries between public health and medicine.

PPH was developed as an in-person program. The program requires in-person activity for students to make timely progress towards their degree.

PPH is located within the Feinberg School of Medicine (FSM). The administrative home for the PPH is the Center for Education in Health Sciences (CEHS) within the Institute for Public Health and Medicine (IPHAM). IPHAM was established in 2012, pursuing the mission of *advancing collaborative research and education to improve the health and well-being of individuals and their communities*. The Graduate School (TGS) at Northwestern provides the academic administrative structure for the PPH. Its mission is to be *a trusted, responsive, visionary leader and partner to maintain and promote the highest quality master's and doctoral education*. Like IPHAM, TGS collaborates with the PPH to guide and sustain an institutional culture that facilitates excellence in teaching, innovation and rigor in research, and the personal and intellectual growth of its diverse student population.

➢ Systems & Procedures

Advising System

The Program in Public Health follows a dual advising model where students are supported by both a professional staff academic advisor and a faculty advisor, each playing complementary roles in their success. The staff academic advisor will serve as a consistent point of contact from the beginning of the program, helping students navigate degree requirements, plans of study, course registration, interpretation of academic policies, while also connecting students to campus resources and supporting overall academic progress. The faculty advisor will provide discipline-specific guidance on coursework selection, research opportunities, career pathways within the field, and Thesis mentorship. Together this collaborative advising structure ensures that students receive both a holistic academic support and expert insight into their chosen area of study, creating a well-rounded advising experience that supports their academic, professional, and personal development.

The faculty advisors will be assigned according to the students' selected concentration.

Communication

The advisor/advisee relationship is most productive when both parties clearly define expectations. Establishing good communication at the outset will increase the likelihood of a good relationship.

We recommend that students regularly evaluate whether the advising relationship meets their needs and consider areas for improvement. Students are encouraged to openly discuss concerns and identify solutions with both their staff academic advisor and faculty advisor.

Final Thesis Project Advising

Contingent upon agreement by all involved parties, some students' faculty advisor may also serve as their primary thesis advisor. However, most students' final thesis advisor(s) will differ from their faculty advisor.

Graduate Student Progress

The Graduate Student Progress (GSP) allows students, advisors, and PPH Program administration to effectively track academic progress. GSP use helps guide advising sessions. We recommend focusing on the following areas:

1. **Plan of Study**: This tab allows you to see which courses you have taken; it is a good tool to use for course advising purposes. Following orientation, students should schedule individual appointments with Maureen Moran, m-moran@northwestern.edu, to complete their plan of study.
2. **Academic Progress**: This tab is used to collect baseline information about your anticipated graduation year/quarter and progress towards your degree completion.
3. **Documents:** This tab can be used to upload PDF documents. Following orientation, new students will complete their initial plan of study worksheet, save it as a PDF and upload it into the GSP. Students are expected to review their plan of study with advisors quarterly. Students should save the plan of study worksheet in case an updated pdf is needed due to changes in the coursework taken. In the event of changes to the uploaded plan of study, a new plan of study should be uploaded after consulting with an advisor.
4. **TGS Forms:** This tab provides a place to "create new form" including the forms required to take a leave of absence, apply for the degree, and note details of degree completion.

➢ Academics & Competencies

In order to prepare students to pursue research in a broad range of topics, the degree requirements for the MS in Biostatistics were developed to teach students biostatistical reasoning and study design methods needed to carry out sound scientific research. Three Concentrations foster curriculum flexibility to meet a range of professional needs and interests.

The Concentration in **Population Health Analytics** is designed for college graduates or students with professional degrees (e.g., MD, DPT, allied health professionals) who intend to plan, direct and execute health research. Emphasis is placed on both biostatistical and epidemiological methods for population health research.

The Concentration in **Statistical Bioinformatics** is designed for college graduates who are interested in working as statistical analysts/programmers on research teams. Statistical Bioinformatics emphasizes cutting-edge computation and analysis for genomics and other bioinformatics 'big data'.

The Concentration in **Statistical Methods and Practice** is also designed for college graduates who are interested in working as statistical analysts/programmers on research teams. Statistical Methods and

Practice encompasses a broad range of statistical theory and methods for data analysis from health and medical research settings.

MS Competency-Based Education

Northwestern University's MS-Biostatistics degree is competency-based. The MS degree is accredited as an "Academic Degree" by the Council on Education for Public Health (CEPH). PPH ensures that MS education is grounded in 12 foundational public health knowledge learning objectives, 11 MS competencies, and (when applicable) five (5) degree concentration competencies.

Graduate-Level Foundational Public Health Knowledge

The foundational public health knowledge learning objectives prepare MS students to substantively address scientific and analytic approaches to the discovery and translation of public health knowledge in the context of a population health framework. Upon completion of required coursework, all students earning the MS in Biostatistics should be able to:

D1.1. Explain public health history, philosophy, and values.
D1.2. Identify the core functions of public health and the 10 Essential Services.
D1.3. Explain the role of quantitative and qualitative methods and sciences in describing and assessing a population's health.
D1.4. List major causes and trends of morbidity and mortality in the US or other community relevant to the school or program with attention to disparities among populations, e.g., socioeconomic, ethnic, gender, racial, etc.
D1.5. Discuss the science of primary, secondary & tertiary prevention in population health, including health promotion, screening, etc.
D1.6. Explain the critical importance of evidence in advancing public health knowledge.
D1.7. Explain effects of environmental factors on a population's health.
D1.8. Explain biological and genetic factors that affect a population's health.
D1.9. Explain behavioral and psychological factors that affect a population's health.
D1.10. Explain the cultural, social, political and economic determinants of health and how the determinants relate to population health and health inequities.
D1.11. Explain how globalization affects global burdens of disease.
D1.12. Explain an ecological perspective on the connections among human health, animal health and ecosystem health (e.g., One Health.).

MS in Biostatistics Competencies

Upon completion of required coursework, all students earning the MS in Biostatistics should be able to:

MSB1. Apply classic methods for continuous and categorical data analysis, including regression and other appropriate statistical approaches.
MSB2. Use computer-based statistical analysis package(s) to manage data.
MSB3. Develop visualized data using computer-based statistical analysis package(s).
MSB4. Analyze data employing computer-based statistical analysis package(s).
MSB5. Implement sample size and power calculations for a range of experimental designs.
MSB6. Interpret results of a health research study, including the relation to findings from other studies, potential biological or social mechanisms, study limitations, and public health implications.

MSB7. Communicate written and oral findings in a scientifically sound manner.
MSB8. Calculate epidemiological measures of association between risk factors and disease.
MSB9. Apply methods and strategies to evaluate and reduce bias in health research.
MSB10. Use criteria to distinguish between association and causality.
MSB11. Apply ethical and regulatory standards to human subjects research.

Concentration-Specific Competencies

Concentration in Population Health Analytics

PHA1. Design an epidemiologic study to address a question of interest;
PHA2. Describe practical considerations for the conduct of health research studies;
PHA3. Access publicly available data resources for population health research;
PHA4. Critically review the scientific literature, synthesize findings across studies, and make appropriate recommendations based on current knowledge; and
PHA5. Develop a clear description of the rationale, methods, results, and overall interpretation of an epidemiologic investigation.

Concentration in Statistical Bioinformatics

SP1. Develop computer files of high-dimensional data for analysis using high performance computing data management techniques;
SP2. Determine and execute appropriate statistical analyses, in particular techniques relevant to bioinformatics, to address a study question;
SP3. Access publicly available databases for bioinformatics research;
SP4. Develop statistical and bioinformatics analysis results in written, graphical and verbal format in response to an analysis request; and
SP5. Identify theoretical underpinnings of advanced statistical models.

Concentration in Statistical Methods and Practice

SMP1. Develop computer files of raw data for analysis using data management and statistical analysis software;
SMP2. Execute appropriate statistical analyses to address a study question;
SMP3. Apply classic methods for the analysis of time-to-event and clinical trial data;
SMP4. Develop statistical analysis results in written and verbal format in response to an analysis request; and
SMP5. Identify theoretical underpinnings of advanced statistical models.

➢ Course Requirements

Students are required to earn 14 units to complete the MS in Biostatistics. Core courses are required for all concentrations

Core Courses (7 units)

BIOSTAT 301 Introduction to Epidemiology (1)
BIOSTAT 302 Introduction to Biostatistics (1)
BIOSTAT 305 Applied Statistical Programming in SAS (1)
BIOSTAT 306 R Programming (1)
BIOSTAT 401 Intermediate Epidemiology (1)
BIOSTAT 402 Intermediate Biostatistics (1)
PUB_HLTH 441 Ethical Issues in Clinical Research (0.5)
BIOSTAT 561 Thesis (0.5)

Concentration in Population Health Analytics

Additional Required Courses (5 units):
BIOSTAT 305 Data Management and Analysis in SAS (1)
BIOSTAT 446 Design, Conduct, and Analysis of Clinical Trials (1)
BIOSTAT 501 Advanced Epidemiology (1)
BIOSTAT 560 Statistical Consulting (0.5)
BIOSTAT 565 Clinical Database Management (0.5)
PUB_HLTH 445 Writing and Peer Reviewing for Publication (1)
Selectives (Choose 1 unit):
PUB_HLTH 412 Infectious Disease Epidemiology and Prevention (1)
PUB_HLTH 524 Cardiovascular Epidemiology (1)
PUB_HLTH 525 Cancer Epidemiology (1)
BIOSTAT 499 Independent Study of Epidemiologic Methods in a Discipline-Specific Context (0.5 or 1)
Electives (Choose 2 units)*

Concentration in Statistical Bioinformatics

Additional Required Courses (4 units):
BIOSTAT 303 Introduction to Probability Theory (1)
BIOSTAT 403 Statistical Inference (1)
BIOSTAT 502 Advanced Biostatistics (1)
BIOSTAT 529 Statistical Genomics and Genetic Data Analysis (1)
Selectives:
Choose 1 Unit
BIOSTAT 305 Data Management and Analysis in SAS (1)
HSIP 441 Health and Biomedical Informatics Methods I (1)
Choose 1 Unit
BIOSTAT 445 Introduction to Statistical Learning (1)
BIOSTAT 522 Network Data Analysis (.5)
HSIP 442 Biomedical Informatics Methods II (1)
Electives (Choose 1.5 units)

Concentration in Statistical Methods & Practice

Additional Required Courses (5.5 units):

BIOSTAT 303 Introduction to Probability Theory (1)
BIOSTAT 305 Data Management and Analysis in SAS (1)
BIOSTAT 403 Statistical Inference (1)
BIOSTAT 446 Design, Conduct, and Analysis of Clinical Trials (1)
BIOSTAT 502 Advanced Biostatistics (1)
BIOSTAT 521 Survival Analysis (1)
BIOSTAT 560 Statistical Consulting (0.5)

Electives (Choose 1.5 units)

Possible Electives

Required courses or selectives from one concentration may be taken as electives for another concentration. Students may incorporate other courses offered in The Graduate School into their training with the approval of the PPH Curriculum Committee. See the Non-PPH Elective Form for procedures and deadlines.

Approved electives (a '*' denotes that this elective may be a requirement depending on concentration):

PUB_HLTH 301 Behavior, Society, and Health (1)
PUB_HLTH 303 Environmental Health Sciences (1)
PUB_HLTH 320 The Role of Community in Public Health (1)
PUB_HLTH 390 Introduction to International Public Health (1) (winter quarter even numbered years)
PUB_HLTH 412 Infectious Disease Epidemiology and Prevention (1)
PUB_HLTH 415 Disease Prevention and Health Promotion: Principles and Applications (1)
PUB_HLTH 416 Program Evaluation (1)
PUB_HLTH 417 Public Health Law: Promoting Healthy Youth Development (1)
PUB_HLTH 420 Introduction to Health Management (1)
PUB_HLTH 435 Health Services Research Design (1)
PUB_HLTH 439 Qualitative Research Methods (1)
PUB_HLTH 443 Humanitarian Response and Health (1)
PUB_HLTH 445 Writing and Peer Reviewing for Publication* (1)
PUB_HLTH 449 Public Health Policy (1)
PUB_HLTH 524 Cardiovascular Epidemiology (1)
BIOSTAT 303 Introduction to Probability Theory* (1)
BIOSTAT 403 Statistical Inference* (1)
BIOSTAT 429 Systematic Review / Meta-Analysis (1)
BIOSTAT 445 Statistical Learning* (1)
BIOSTAT 446 Design, Conduct, and Analysis of Clinical Trials* (1)
BIOSTAT 449 Independent Study of Approved Topic (0.5 to 1.0)
BIOSTAT 502 Advanced Biostatistics* (1)
BIOSTAT 521 Survival Analysis* (1)
BIOSTAT 522 Network Data Analysis (0.5)
BIOSTAT 523 Causal Inference
BIOSTAT 527 Statistical Methods for Missing Data (0.5)
BIOSTAT 529 Genomics and Genetic Data Analysis* (1)

BIOSTAT 560 Statistical Consulting* (0.5)
BIOSTAT 565 Clinical Database Management* (0.5)

➢ Thesis Requirements for all Concentrations

All master's thesis-related inquiries should be sent to biostat.thesis@northwestern.edu

Master's Thesis Topic Proposal – Due Fall Quarter (exact date to be posted on Canvas)

All MS in Biostatistics students are required to formally submit a thesis topic proposal and thesis advisor declaration form. The topic proposal will include a preliminary title with research hypotheses, a description of the data source, and it must include both primary and secondary advisor names and signatures. Students will be provided the submission guidelines at the beginning of the Fall quarter. The topic proposal and advisor declarations will be submitted on the same form.

Master's Thesis Advisors – Due Fall Quarter (exact date to be posted on Canvas)

The master's thesis is supervised and read by the student's thesis advisors. The **primary thesis advisor** must be a Biostatistics or Epidemiology faculty member in the Department of Preventive Medicine. Early in the program, the director of the thesis efforts (Lucia Petito) will organize and help pair students with a primary faculty advisor if they have not yet identified one on their own. The **secondary thesis advisor** may be a faculty member from another department, but will generally be a specialist from the applied field relevant to the student's thesis and/or the secondary advisor will provide the study dataset. The formal thesis advisors must be declared at the same time as the topic proposal, through submission to Canvas.

When the final draft of the thesis is submitted, students will be required to submit a thesis approval form, signed by their thesis advisors along with their final thesis document, indicating the advisors have read and approved the final draft of the thesis.

Master's Thesis Project Proposal – Due Winter Quarter of Graduation Year (exact date to be posted on Canvas)

All MS students will submit a formal project proposal that will include: project title, research team members, scientific background and rationale, study question, hypothesis, sources of data, data analysis plan(s), and references. The proposal format will be provided via Canvas during the Fall quarter. The director of the thesis projects (Lucia Petito) will review the proposals to ensure they meet requirements for the master's program. She or a representative (from the Thesis Review Committee or from the MS Leadership) will provide comments and feedback (or recommend modifications) within two weeks of submission.

Preliminary Results – Due Winter Quarter of Graduation Year (exact date to be posted on Canvas)

All MS students will submit a set of draft tables and figures that they envision will be included in their final thesis manuscripts. At minimum, there should be two tables and one figure. These tables and figures should include publication-ready formatting and labeling. These tables and figures will help

faculty monitor student progress. Submissions will occur via Canvas, and the director of the thesis project or a representative will review these submissions and provide feedback within two weeks of submission.

Original Research Manuscript – Due Spring Quarter of Graduation Year (exact date to be posted on Canvas)

The master's thesis is meant to provide an opportunity for students to demonstrate mastery of the skills they acquire in coursework and through research experience. A manuscript-style thesis not only meets the requirements for the master's degree but also produces a relevant 'product' that can help advance the student's career if it is accepted by a peer-reviewed journal for publication.

The final master's thesis product may vary in format. In general, it will take the form of a *publishable* (i.e., ready for submission to a peer-reviewed journal) manuscript. It will be approximately 2500-3500 words. Formatting should meet target journal submission requirements. The manuscript must contain at minimum, the following sections:

- Abstract
- Introduction
- Methods
- Results
- Conclusions
- Two tables in publication-ready format
- One figure in publication-ready format

Examples of acceptable thesis projects include: studies in the area of human subjects' research (i.e., involving appropriately de-identified human data), statistical/bioinformatics methods and/or simulation studies exploring statistical/bioinformatics methods, creation of software (e.g., R) packages, secondary data analysis, or meta-analyses. Examples of unacceptable thesis projects include: non-quantitative literature review and studies based on non-human subjects' research. To ensure adequacy of thesis topics, students will submit a topic proposal in the Fall. All inquiries regarding acceptability of topics may be sent to biostat.thesis@northwestern.edu.

Although there is no minimum sample size requirement that defines an epidemiologic study, most often samples are large (>100 participants) and participants are commonly selected in a manner that makes them representative of some larger population. Preparing study protocols, obtaining IRB approval, recruiting and identifying participants, collecting measurements, and analyzing data are each time-consuming activities that often require financial support (particularly data collection).

Most often, proposing to collect new data for an epidemiologic study is too ambitious for students to complete during the short time in which they are enrolled in the MS program. However, it is possible that some students may already have an identified research area and may work on projects beginning with the collection of new data that the student will be permitted to analyze for his/her research project. It may also be appropriate for a student to collect 'pilot' data (a small sample) in order to generate some preliminary effect estimates to use in a grant application to justify a larger study. If such activities are placed in the proper context in the thesis proposal form, they are likely to be approved. **Studies that are not conducted in a human population are not acceptable.**

In most cases, secondary data analyses will be the most feasible research projects given the financial and time constraints associated with collecting epidemiologic data. **A literature review or non-quantitative review is not acceptable.** There are a number of publicly available sources for research data, such as data collected by the National Center for Health Statistics (http://www.cdc.gov/nchs/) or data that are publicly available because they were collected with funding from the National Institutes of Health (NIH). The Department of Preventive Medicine also houses a number of cohort and cross-sectional studies that may be appropriate sources of data for students to use to complete their master's degree thesis.
Additionally, there are investigators throughout the Feinberg School of Medicine who may also have collected data to address one question, but have considerable additional data that students can use to address new research questions. Students should discuss their research interests with their advisors, course instructors, and research mentors who can facilitate finding secondary data sources or providing logistical and financial support for potential thesis projects.

Evaluation of Master's Thesis

The Thesis Review Committee will review the final thesis product according to a structured rubric. The thesis guidelines and rubric explain the methods through which faculty assess the theses with regard to students' demonstration of the MS degree competencies and mastery of skills. All department-affiliated faculty who are supervising master's theses are welcome to consult with the Thesis Review Committee or Lucia Petito about what constitutes a project of acceptable quality to serve as a master's thesis. The student's master's thesis advisor(s) is/are encouraged to provide regular feedback to students to ensure that theses will ultimately be approved by the Thesis Review Committee. All students must enroll in BIOSTAT 561 (0.5) in the Spring quarter prior to graduation. Prior to the start of the Spring quarter, they must have submitted initial data analysis/results. During the Winter quarter and the first several weeks of the Spring quarter, the instructor (Adin-Cristian Andrei) will work with students to provide feedback and direction for completion of manuscript writing. There will be additional milestones (e.g., an oral presentation) the students must meet and pass as part of the BIOSTAT 561 credit. Students must pass BIOSTAT 561 course *and* the Thesis Review Committee must approve the final thesis document in order for students to be eligible for graduation.

Timeline

The table below illustrates the timeline for completion of thesis milestones.

Requirements	Date	Where to submit
Initial consideration of research topic + project/advisor pairing	Summer / Fall	N/A; Discuss with advisor/ research mentor.
Submit Form #1 topic proposal and formal advisor declaration	Fall Quarter (date specified in Canvas)	Electronic copy uploaded to Canvas (Biostat 561) by date and time specified.

Thesis Proposal (Form #2)	Winter Quarter (date specified in Canvas)	Electronic copy uploaded to Canvas (Biostat 561) by date and time specified.
Submit Preliminary Data Analysis Results (Tables and Figures)	Winter Quarter (date specified in Canvas)	Electronic copy uploaded to Canvas (Biostat 561) by date and time specified.
Completed Master's Thesis and Form #3	Spring Quarter (date specified in Canvas)	Electronic files uploaded to Canvas (Biostat 561) by date and time specified.

Failure to meet the deadline will delay graduation. In the event that the final version of the thesis is not awarded a passing grade, the student must continue to revise the thesis until it is judged by the Thesis Review Committee to be of passing quality. This process will result in graduation being delayed until the end of summer quarter or later.

➢ Software Recommendations

The majority of MS courses and the student thesis projects require the use of statistical software. Course instructors and advisors have varied preferences for different analysis software packages, and students will be trained to use SAS and R, the two most common analysis packages. Although certain course instructors may require the use of one or another, students should work with their thesis advisors to agree upon the program they will use for their master's thesis.

Proficiency in SAS is a required skill for many statistical analyst positions, and SAS is commonly used in the biomedical research field. SAS is installed in the PPH student lab for student use and is available in the Galter Health Sciences Library. Students are strongly encouraged to purchase a student/university version of the SAS license. They may refer to Northwestern University's IT website for resources and options in accessing SAS (https://www.it.northwestern.edu/software/sas/index.html).

R is a free powerful statistical analysis software program that is also commonly used in the statistical community. Students will have the opportunity to learn to use R software and it is free and easy to download onto personal computers. R can be downloaded through the following website: http://www.r-project.org/ .

➢ Registration Policies

Students register online; registration opens 6-8 weeks before the quarter begins for students who are continuing their studies; students in their first quarter of study may not register until the week before classes begin.

Use CAESAR (Computer Assisted Electronic Student Access Route) available at http://www.registrar.northwestern.edu/ (accessible using your NU NetID and password) to register for classes.

The Registrar's office has a tip sheet, available at http://ses.northwestern.edu/documentation/SC_Registration_Tip_Sheet_v9.pdf.

Students will be notified via a quarterly registration email if specific MPH courses require a permission number. To obtain a permission number, email pphregistration@northwestern.edu

Continuous Registration

As a Program in Public Health student, you are enrolled in The Graduate School (TGS) at Northwestern. TGS guidelines and policies apply to all students in the Program in Public Health. One such policy is that all students in TGS must be registered in their graduate program at Northwestern University in each of the fall, winter and spring terms until all degree requirements have been completed and the degree has been awarded. This is called "continuous registration." See Continuous Registration Policy for more information.

Students enrolled in Continuous Registration must make progress toward their degree. MS in Biostatistics who enroll in Continuous Registration must demonstrate through regular (at a minimum, monthly) check-ins with the program director or the director's designee that they are actively making progress toward the degree. Making progress toward the degree might be demonstrated by completion of assignments for which a grade of incomplete was assigned and/or agreed upon interim steps toward completion of the thesis. Failure to make academic progress over two quarters will result in academic probation of one quarter after which the student may be dismissed.

TGS 512

Available to students who completed the program coursework and are continuing in their degree program (writing a thesis or dissertation and/or performing research required for the degree) but **not** receiving University or external funding. TGS 512 is a full-time registration intended for students who are continuing to work in a full-time capacity toward degree completion.

TGS 512 is $100/quarter and allows for:

- Continuation of the student's Net ID and email account
- Access to University facilities such as libraries, labs, and sports facilities
- Maintenance of one's visa status
- The ability to defer student loans

- The ability to take additional cost-of-living loans (federal and alternative) as determined by their financial state; and
- Ability to enroll in NU-SHIP (Northwestern University Student Health Insurance) and be charged the annual premium

Note that students enrolled in TGS 512:

- are not eligible for TGS Activity Fee or its attendant services, including legal services and U-Pass
- are not eligible for the health insurance subsidy
- may not register for any additional units of study
- must be making progress toward degree completion

To register for TGS 512 send a request by email to gradservices@northwestern.edu and copy pphregistration@northwestern.edu

Students who are not registered for classes (including BIOSTAT 561) and who are unable to make progress toward the degree during a given quarter (excluding summer), should apply for a leave of absence. See https://www.tgs.northwestern.edu/academic-policies-procedures/policies/leaves-of-absence.html for more information about TGS leave of absence polices.

A non-registered student will be deactivated. A student who is deactivated must apply for readmission to TGS and pay a $250 readmission fee as well as any fees associated with "continuous registration" for the quarters the student was absent. See Leaves, Withdrawal & Readmission.

Leave of Absence

Leave of Absence is defined as a temporary separation from the University for a minimum of one quarter and a maximum of one year. Students who wish or need to interrupt their progress towards the degree may petition for a leave of absence. During a leave of absence, students are not permitted to enroll at the University and will not be considered active students. For more information visit, https://www.tgs.northwestern.edu/academic-policies-procedures/leaves-withdrawal-readmission.html.

Independent Studies

Students may meet the need for specific instruction not otherwise offered in the curriculum through an individual independent study directed by a member of the faculty. Requests for an independent study must be discussed first with your academic advisor and the chair(s) of the Curriculum Committee (Maureen Moran and Kwang-Youn Kim) PRIOR to submission of an independent study request from. This ensures that the student is connected to appropriate faculty and the overlap with existing scheduled courses is minimized.

Deadlines for Independent Study Requests Forms are:

- Fall Quarter: September 1st
- Winter Quarter: December 1st
- Spring Quarter: March 1st
- Summer Quarter: June 1st

Policy on Non-PPH Elective Courses

Students need the approval of the PPH Curriculum Committee to enroll in elective courses that are not listed by the Program in Public Health (PPH). A student may take no more than THREE non-PPH courses as electives. Note: This policy does not apply to non-degree, special students:

1. Proposals must be submitted to PPHregistration@northwestern.edu by the first of the month and BEFORE registration.
    a. September 1st for Fall Quarter Enrollment
    b. December 1st for Winter Quarter Enrollment
    c. March 1st for Spring Quarter Enrollment
    d. June 1st for Summer Quarter Enrollment
2. Proposals must include:
    a. The course syllabus
    b. The "Request for Approval of a Non-PPH Elective Course" Form
3. In cases where the instructor's permission is needed to enroll in a non-PPH course, the student is responsible for obtaining permission.
4. Final approval must be given by the PPH Curriculum Committee by way of the Request Form BEFORE the student registers. If a student enrolls in a non-PPH elective course without receiving prior approval from the PPH Curriculum Committee, the student risks not receiving credit for the course towards the PPH degree.
5. At the end of the course, the student will be asked to complete a course evaluation of the non-PPH elective course.

Transfer Credit

Requires transcript review by the Director of Graduate Affairs and documentation in GSP of the coursework for which transfer credit is being applied.

- From a School or Program in Public Health:
    - Graduate level coursework taken from a CEPH accredited school or program.
    - Grade of B or higher (if graded).
    - Taken within the past 5 years.
    - Maximum units that can be transferred equals number of units needed to earn the degree minus 9.
- From a Graduate or Professional School:
    - Graduate or professional level coursework taken at an accredited school or university.
    - Grade of B or higher (if graded).
    - Taken within the past 8 years.
    - Up to 2 units may be transferred.

Placement

NOTE: placing out of a course does not change the number of credits required for graduation.
Placing into an Upper-Level Course (e.g., Intermediate Biostatistics and Intermediate Epidemiology):

- Decisions are made on a case-by-case basis.
- No credit will be granted for lower-level pre-requisite courses not taken due to this policy.
- If course was taken from a School or Program in Public Health:

    - Graduate level coursework taken from a CEPH accredited school or program.
    - Grade of B or higher (if graded).
    - Taken within the past 5 years.
- From a Graduate or Professional School:
    - Graduate or professional level coursework taken at an accredited school or university.
    - Grade of B or higher (if graded).
    - Taken within the past 5 years.
- If course was taken as an undergraduate:
    - Within the past 5 years
    - Students will be offered a placement exam and must receive a grade of 90% or higher to place out of the introductory course.

Transcripts

A current student may obtain an unofficial Transcript from CAESAR through https://caesar.northwestern.edu/. Graduates and inactive students in need of an official graduate school transcript should contact the Evanston office:

Transcript Department
Office of the Registrar
Northwestern University
633 Clark Street
Evanston, IL 60208
(847) 491-5234

Complete details, including fees and restrictions, are available online http://www.registrar.northwestern.edu/academic_records/obtaining_a_transcript.html

➢ Tuition and Billing

Billing Schedule

An MS student is billed on the first of the month after registering for a class. Tuition bills must be paid before the student will be permitted to register in a subsequent quarter. Questions about tuition bills should be addressed studentaccounts-ev@northwestern.edu

Tuition rates for MS students can be found at: http://www.northwestern.edu/sfs/tuition/graduate/the-graduate-school.html

Additional Charges

Full-time graduate students are billed per quarter for an activity fee. The bulk of the activity fee covers the cost of the CTA UPass. This pass provides unlimited rides for the student on CTA trains and buses. The fee also funds the cost of an attorney that assists students with issues such as landlord-tenant disputes and traffic violations, as well as graduate school community-building activities.
Part-time graduate students are not charged the activity fee and are not eligible for the UPass.

➢ The Graduate School (TGS) Important Policies

This information applies to the current academic year and is updated periodically. Graduate programs may have additional requirements. In addition to TGS and program policies, graduate students are subject to and should be aware of University policies pertaining to students.

Failure to read this information does not excuse a student from knowing and complying with its content.

The link below contains the policies of The Graduate School. You may click on each policy to see detailed requirements and procedures:
https://www.tgs.northwestern.edu/academic-policies-procedures/policies/#gsc.tab=0

Withdrawals and Refunds

Students who wish to withdraw from the university must inform the Director of Graduate Affairs and email TGS Student Services immediately (gradservices@northwestern.edu). International graduate students should also contact the International Office.

The amount of tuition refunded depends on when during the quarter the withdrawal request is made. View the refund schedule (http://www.northwestern.edu/sfs/payments/withdrawing-from-the-university/withdrawal-calculator.html) to determine how much tuition will be refunded based on what percentage of the quarter has elapsed.

Grievances and Conflict Resolution

Graduate students sometimes experience important disagreements and problems regarding program policies and/or their professional relationships with faculty. Should the student wish to seek assistance and/or state a grievance regarding such a problem, the student should consult first with his or her staff academic advisor and faculty advisor.

If the issue involves the advisor, the student should seek assistance at the next level up:

Professor Maureen Moran ***Dir. Graduate Affairs (Level 1)***	***Dr. Kwang-Youn Kim*** ***MSB Director (Level 2)***	***Dr. Ronald Ackermann*** ***PPH Director*** ***(Level 3)***

The student is encouraged to take the grievance first to the lowest level of the hierarchy and then, if necessary, move up from one level to the next.

Students may wish to talk with a higher administrator in TGS. At the present time, the Associate Dean of Student Services in TGS fills this role.

Graduation

In order to graduate, you must complete an 'Application for Degree' and the 'Master's Completion Form' in **GSP.**

When you have successfully completed all final requirements and barring any problems or holds (e.g., X or Y grades, bursar balances), graduation will be approved. You will receive emails notifying you of form submission and final approval.

Consult the Academic Calendar for specific dates.

Graduation Ceremonies
The Program in Public Health holds two Graduation Celebrations each year, one in May for the MD/MPH graduates and another in June for all other graduates of the PPH programs (including MS in Biostatistics graduates). In addition, graduating students are encouraged to attend the Commencement activities held in Evanston during the third week in June. Information on tickets, caps and gowns, and other pertinent information regarding commencement events in Evanston is posted online at: http://www.northwestern.edu/commencement/.

Approximately 8 weeks after commencement, your diploma will be mailed to the address indicated on the 'Application for Degree'. If your diploma mailing address changes after you submit your 'Application for Degree', please contact gradservices@northwestern.edu to update your mailing address.

Grades
The MS in Biostatistics follows The Graduate School policy on grading: https://www.tgs.northwestern.edu/academic-policies-procedures/policies/general-registration-policies.html#grades

➢ Student Involvement

Student Representation on Committees
Students are recruited during orientation and via email to join the following committees: Community Advisory Board, Curriculum Committee, Evaluation Committee, Health Equity Advancement Committee, and Executive Committee. Interested students are asked to rank their choice of committee and assigned appropriately by the Accreditation Tak Force leadership. A maximum of three student representatives are appointed to each committee, except for the Community Advisory Board which may include up to five current students. Students may join up to two committees, assuming there are spaces available. The program prioritizes selecting an array of students that enable our committee membership to be representative of each of our degree programs, concentrations, and graduation year cohorts.

Northwestern Public Health Review
Founded in 2013, the Northwestern Public Health Review (NPHR) endeavors to stimulate the exchange and cross-pollination of public health ideas, resources, and opportunities across the Northwestern community and beyond. Through multiple channels, including a journal, blog, and special events, the student-run NPHR offers opportunities for learning and reporting on public health issues. For more information and to get involved, see https://sites.northwestern.edu/nphr/

➢ Student Resources

AccessibleNU

AccessibleNU works to provide a supportive environment for all students including accommodations. Visit the website below to learn more https://www.northwestern.edu/accessiblenu/

Counseling & Psychological Services (CAPS)

The Chicago CAPS office provides a variety of services for graduate and professional students whose programs are located on Northwestern University's Chicago Campus. Visit the website below to learn more https://www.northwestern.edu/caps-chicago/index.html

633 North Saint Clair Street Building Access Card

To access the 633 building, including the Student Lab and Program in Public Health administrative offices, you need a key card which can be requested from program staff. Your card is registered to you, and you should not share it with others. Anyone entering or leaving the building after 6pm must sign in and out or swipe their card. The key card must be scanned after hours to access the 20th floor via the elevator. All key cards must be returned before you leave the program – whether you are graduating or taking a Leave of Absence. If you lose the 633 building key card please report it immediately to program staff.

Library Services

There are two libraries on the Chicago Campus: The Galter Health Sciences Library, and the Pritzker Legal Research Center.

The Galter Health Sciences Library

The Galter Health Sciences Library, located in the Ward Building, is the primary resource for students in the Program in Public Health. Many resources are available electronically through http://www.galter.northwestern.edu/. You may need to use a VPN (virtual private network) to access some library resources from off campus.

The Pritzker Legal Research Center

Located within the law school at 357 East Chicago Avenue, the Center's hours, policies and holdings are described at: http://www.law.northwestern.edu/lawlibrary. Resources available at the Center that may be of special interest to public health students include AccessUN, a database that provides access to current and retrospective United Nations documents and publications.

WildCARD and Building Access

The WildCARD is the Northwestern University identification card, issues to all students, faculty and staff. This card is your photo identification and all-purpose card on campus. For more information about retail store discounts and other benefits of your WildCARD, check out http://www.northwestern.edu/wildcard/