



Twin Cities Campus

Clinical Research M.S.

School of Public Health - Adm

School of Public Health

Link to a [list of faculty](#) for this program.

Contact Information:

School of Public Health, MMC 819, A395 Mayo Memorial Building, 420 Delaware Street, Minneapolis, MN 55455 (612-626-3500 OR 1-800-774-8636)

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Website: <http://www.sph.umn.edu>

- Program Type: Master's
- Requirements for this program are current for Fall 2022
- Length of program in credits: 38
- This program does not require summer semesters for timely completion.
- Degree: Master of Science

Along with the program-specific requirements listed below, please read the [General Information](#) section of the catalog website for requirements that apply to all major fields.

The MS in clinical research is a graduate degree as well as a career development path for physician-scientists, clinical scholars, and biomedical researchers.

The clinical research MS program trains students to perform patient-oriented research, develop therapeutic interventions conduct clinical trials, write grants, and develop data analytic skills. The program offers maximum flexibility and it can be completed online and students have varied capstone project opportunities.

The School of Public Health is accredited by the Council on Education for Public Health (CEPH).

Program Delivery

This program is available:

- completely online (all program coursework can be completed online)

Prerequisites for Admission

The preferred undergraduate GPA for admittance to the program is 3.00.

An advanced health professional degree (MD, DDS, DVM, DO, DNP, DC, PharmD, PhD, etc.) or other advanced doctoral degree in a clinical biomedical field from an accredited university.

Other requirements to be completed before admission:

Students must have completed or must be at an advanced stage of their clinical practice training. All applicants should have an identified mentor at the University of Minnesota who will provide them with a research project and guide their research prior to applying for admission. Applicants who are part of a University of Minnesota fellowship or residency program, should in addition, discuss their application with their fellowship or residency director. One of the three required recommendation letters must be from the mentor at the University of Minnesota willing to provide mentorship and access to a research project.

Special Application Requirements:

An official transcript verifying completion of an advanced health professional degree and training sufficient to be eligible for a license to practice. One of the three required recommendation letters and a completed School of Public Health Recommendation form from the clinical director of training supporting the applicant's potential as a clinical researcher.

International applicants must submit score(s) from one of the following tests:

- TOEFL
 - Internet Based - Total Score: 100
 - Paper Based - Total Score: 600
- IELTS
 - Total Score: 7
- MELAB
 - Final score: 80



The preferred English language test is Test of English as Foreign Language

Key to [test abbreviations](#) (TOEFL, IELTS, MELAB).

For an online application or for more information about graduate education admissions, see the [General Information](#) section of the catalog website.

Program Requirements

Plan B: Plan B requires 38 major credits and 0 credits outside the major. The final exam is oral. A capstone project is required.

Capstone Project: Students can opt to complete a manuscript or a grant proposal for their capstone project. The topic and scope of the project must be approved by the advisor and director of graduate studies.

This program may be completed with a minor.

Use of 4xxx courses towards program requirements is not permitted.

A minimum GPA of 3.00 is required for students to remain in good standing.

At least 1 semesters must be completed before filing a Degree Program Form.

Students must complete both sessions of the University's Responsible Conduct of Research course, validated by ORTTA. Students also must complete the NIH's online training, Protection of Human Research Subjects, validated by electronic certificate upon successful completion.

A grade of at least B- must be earned for the core, epidemiology, and clinical trials courses taken on the A-F grade basis. If PUBH 6320 is taken, a grade of at least A- must be earned.

Required Core Courses (16 credits)

Take the following courses:

[PUBH 6250](#) - Foundations of Public Health (2.0 cr)

[PUBH 6301](#) - Fundamentals of Clinical Research (3.0 cr)

[PUBH 6310](#) - Clinical Epidemiology I (1.0 cr)

[PUBH 6311](#) - Clinical Epidemiology II (1.0 cr)

[PUBH 6450](#) - Biostatistics I (4.0 cr)

[PUBH 6451](#) - Biostatistics II (4.0 cr)

[PUBH 6742](#) - Ethics in Public Health: Research and Policy (1.0 cr)

Epidemiology Course (3 credits)

Select one of the following courses in consultation with the director of graduate studies.

[PUBH 6341](#) - Epidemiologic Methods I (3.0 cr)

or [PUBH 6320](#) - Fundamentals of Epidemiology (3.0 cr)

Clinical Trials Course (3 credits)

Select one of the following courses in consultation with the director of graduate studies.

[PUBH 7420](#) - Clinical Trials: Design, Implementation, and Analysis (3.0 cr)

or [PUBH 7415](#) - Introduction to Clinical Trials (3.0 cr)

Capstone Project (6 to 10 credits)

Take 6 to 10 credits of PUBH 8394, in consultation with the advisor and director of graduate studies.

[PUBH 8394](#) - Capstone Project: Clinical Research (1.0 - 10.0 cr)

Electives

Select electives in consultation with the director of graduate studies to meet the 38-credit requirement.

[DENT 8114](#) - Topics in Advanced Periodontology: Literature Review (2.0 cr)

[DENT 8120](#) - Advanced Principles and Techniques of Orofacial Pain Disorders (2.0 cr)

[DENT 8121](#) - Current Literature in TMD and Orofacial Pain (1.0 cr)

[ECP 5220](#) - Regulatory Issues in Drug Research (2.0 cr)

[ECP 5620](#) - Drug Metabolism and Disposition (3.0 cr)

[ECP 8100](#) - Seminar (1.0 cr)

[MICA 8013](#) - Translational Cancer Research (2.0 cr)

[NURS 6102](#) - Family Health Theory (2.0 cr)

[NURS 7202](#) - Moral and Ethical Positions and Actions in Nursing (2.0 cr)

[NURS 8152](#) - Advanced Ethics in Nursing Research and Scholarship (2.0 cr)

[NURS 8172](#) - Theory and Theory Development for Research (3.0 cr)

[NURS 8173](#) - Principles and Methods of Implementing Research (3.0 cr)



NURS 8175 - Quantitative Research Design and Methods (3.0 cr)
PHAR 6224 - Advanced Pharmacogenomics and Precision Medicine (2.0 cr)
PHCL 5111 - Pharmacogenomics (3.0 cr)
PUBH 6108 - Foundations of Global Health (2.0 cr)
PUBH 6181 - Surveillance of Foodborne Diseases and Food Safety Hazards (2.0 cr)
PUBH 6303 - Clinical Research Project Seminar (2.0 cr)
PUBH 6325 - Data Processing with PC-SAS (1.0 cr)
PUBH 6343 - Epidemiologic Methods III (4.0 cr)
PUBH 6348 - Writing Research Grants (2.0 cr)
PUBH 6381 - Genetics in Public Health in the Age of Precision Medicine (2.0 cr)
PUBH 6385 - Epidemiology and Control of Infectious Diseases (2.0 cr)
PUBH 6386 - Cardiovascular Disease Epidemiology and Prevention (2.0 cr)
PUBH 6387 - Cancer Epidemiology (2.0 cr)
PUBH 6389 - Nutritional Epidemiology (2.0 cr)
PUBH 6420 - Introduction to SAS Programming (1.0 cr)
PUBH 6717 - Decision Analysis for Health Care (2.0 cr)
PUBH 6803 - Conducting a Systematic Literature Review (3.0 cr)
PUBH 6863 - Understanding Health Care Quality (2.0 cr)
PUBH 6864 - Conducting Health Outcomes Research (3.0 cr)
PUBH 7430 - Statistical Methods for Correlated Data (3.0 cr)
PUBH 7440 - Introduction to Bayesian Analysis (3.0 cr)
PUBH 7445 - Statistics for Human Genetics and Molecular Biology (3.0 cr)
PUBH 7450 - Survival Analysis (3.0 cr)
PUBH 7470 - Study Designs in Biomedical Research (3.0 cr)
TMDP 8441 - Seminar in Temporomandibular Disorders & Orofacial Pain (1.0 cr)
VMED 5080 - Problems in Veterinary Epidemiology and Public Health (1.0 - 3.0 cr)
VMED 5165 - Surveillance of Foodborne Diseases and Food Safety Hazards (2.0 cr)
VMED 8090 - Epidemiology of Zoonoses and Diseases Common to Animals and Humans (3.0 cr)