

Academic Policies- MSCR

2022 -- 2023



Department
of
Epidemiology

Gillings School
of Global
Public Health

University
of
North Carolina
at
Chapel Hill

Advising

Mentoring

Degree Requirements

Learning Objectives

...and more



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INTRODUCTION

[Academic Policies](#) provides comprehensive information on policies and requirements for Master's and Doctoral programs in the Department of Epidemiology. It is intended for the use of students and faculty and is updated annually. Many forms are referenced throughout this document and can be found at the links below. You need to pay close attention to the instructions in this document regarding which forms you complete and which ones the Academic Coordinator will complete.

Gillings Inclusive Excellence Statement

We, the [School's leadership](#), are committed to ensuring that the School is a diverse, inclusive, civil and welcoming community. Diversity and inclusion are central to our mission — to improve public health, promote individual well-being and eliminate health inequities across North Carolina and around the world. Diversity and inclusion are assets that contribute to our strength, excellence and individual and institutional success. We welcome, value and learn from individual differences and perspectives. These include but are not limited to: cultural and racial/ethnic background; country of origin; gender; age; socioeconomic status; physical and learning abilities; physical appearance; religion; political perspective; sexual identity and veteran status. Diversity, inclusiveness and civility are core values we hold, as well as characteristics of the School that we intend to strengthen.

We are committed to expanding diversity and inclusiveness across the School — among faculty, staff, students, on advisory groups, and in our curricula, leadership, policies and practices. We measure diversity and inclusion not only in numbers, but also by the extent to which students, alumni, faculty and staff members perceive the School's environment as welcoming, valuing all individuals and supporting their development.

For more about diversity and inclusion at the School, visit our [Diversity and Inclusion](#) page.

OVERVIEW

Department Mission Statement

Our mission is to improve the public's health by training epidemiologists and by advancing knowledge concerning the causes and prevention of disease and the promotion of health. We strive to creatively integrate substantive knowledge and methods from many fields into epidemiologic research, teaching, and practice, with an ultimate commitment to benefit public health.

Our goals are to:

- Provide the highest quality education to enable scientists and health professionals to advance epidemiology as a discipline and apply their skills to advance scientific knowledge in public and private settings.
- Advance interdisciplinary and multilevel knowledge of health and disease in populations.

- Create and evaluate opportunities to promote health and reduce illness and disability in populations regardless of socioeconomic status. (i.e., a diversity goal).
- Innovate and advance the field of epidemiology through the development of epidemiologic methods.
- Partner with public health agencies to improve the health of populations through the training of public health leaders and the application of epidemiologic knowledge by public health practitioners.
- Improve the health of populations in the State of North Carolina and globally.

Department Organization

The Department of Epidemiology's Chair is Til Stürmer, MD, PhD. Dr. Audrey Pettifor is Associate Chair of the department. Department faculty as of July 2022 include 39 tenure track faculty (including 10 jointly appointed) and 23 fixed-term faculty (including 2 jointly appointed). There are 56 staff who help with the central and research administrative aspects of the department. A listing of department faculty and staff can be found here- <https://sph.unc.edu/epid/epid-faculty-and-staff/>.

The students have a central organizational group – the Epidemiology Student Organization. Their email address is eso@unc.edu.

The Department of Epidemiology has four standing committees: 2 Admissions Committees (PhD/MSCR and MPH), Graduate Studies Committee and Epidemiology Inclusive Excellence. In addition, there is faculty representation to several SPH committees: IRB, Academic Programs Committee, Inclusive Excellence Council, Research, Space, and Academic Promotion and Tenure.

The Admissions Committees handle all aspects of the admissions and recruitment process. Membership consists of faculty from the major focus areas, as well as the Academic Coordinator.

The Graduate Studies Committees provide oversight for the department's graduate program with respect to overall curriculum development and evaluation, requirements, qualifying examinations, new course and program approval, and other academic matters. Membership consists of departmental faculty representing both methods and substantive areas, and the Academic Coordinator. In addition, 2 to 3 student representatives are identified by the Epidemiology Student Organization to serve on the committees.

QUESTIONS?

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COURSES OFFERED IN THE DEPARTMENT OF EPIDEMIOLOGY

A complete list of courses, along with course descriptions and current syllabi, is available on the [Courses](#) webpage of the department's website.

I. METHODS COURSES

- EPID 600: Principles of Epidemiology for Public Health
- EPID 700: SAS and Data Management
- EPID 704: Socially Responsible Epidemiology
- EPID 705: Introduction to Deductive and Probability Logic in Epidemiology
- EPID 710: Fundamentals of Epidemiology
- EPID 711: Clinical Measurement and Evaluation
- EPID 712: Readings in Fundamentals of Epidemiology
- EPID 715: Theory and Quantitative Methods in Epidemiology
- EPID 716: Epidemiologic Data Analysis
- EPID 718: Analytic Methods in Observational Epidemiology
- EPID 719: Readings in Epidemiologic Methods
- EPID 722: Advanced Epidemiologic Methods
- EPID 726: Epidemiologic Research Methods
- EPID 731: Systematic Review and Meta-Analysis
- EPID 801: Data Analysis in Oral Epidemiology
- EPID 804: Design of Clinical Research Studies

II. SUBSTANTIVE COURSES

- EPID 625: Injury as a Public Health Problem (cross-listed as HBEH 625/MHCH 625)
- EPID 626: Violence as a Public Health Problem (cross-listed as HBEH 626/MHCH 626)
- EPID 735: Cardiovascular Epidemiology
- EPID 738A: Methods and Applications of Cardiovascular Disease Surveillance
- EPID 738B: Epidemiology of Stroke
- EPID 743: Genetic Epidemiology: Methods and Applications
- EPID 750: Fundamentals of Public Health Surveillance
- EPID 754: Advanced Methods in Infectious Disease Epidemiology
- EPID 755: Introduction to Infectious Disease Epidemiology
- EPID 757: Epidemiology of HIV/AIDS in Developing Countries
- EPID 758: Methods and Principles of Applied Infectious Disease Epidemiology
- EPID 759: Methods in Field Epidemiology
- EPID 760: Vaccine Epidemiology
- EPID 765: Methods and Issues in Pharmacoepidemiology
- EPID 766: Epidemiologic Research with Healthcare Databases
- EPID 770: Cancer Epidemiology and Pathogenesis
- EPID 771: Cancer Epidemiology: Survivorship and Outcomes
- EPID 772: Cancer Prevention and Control (cross-listed as HBEH 765/HPM 765)
- EPID 775: Advanced Cancer Epidemiology: Classic and Contemporary Controversies in Cancer Causation
- EPID 785: Environmental Epidemiology

EPID 787: Advanced Environmental Epidemiology
EPID 790: Intervention Epidemiology
EPID 810: Physical Activity Epidemiology and Public Health (cross-listed as NUTR 810)
EPID 814: Obesity Epidemiology (cross-listed as NUTR 814)
EPID 815: Diet and Cancer (cross-listed as NUTR 815)
EPID 818: Analytical Methods in Nutritional Epidemiology (cross-listed as NUTR 818)
EPID 826: Introduction to Social Epidemiology
EPID 827: Social Epidemiology: Design and Interpretation
EPID 851: Reproductive and Perinatal Epidemiology (cross-listed as MHCH 851)
EPID 853: Advanced Topics in Perinatal & Pediatric Epidemiology (cross-listed as MHCH 853)

III. SUPPORTING COURSES

EPID 701: R for Epidemiologists
EPID 742: Integrating Biomarkers in Population-Based Research
EPID 795: Data in Public Health

IV. CREDIT SEMINARS

EPID 764: Hospital Epidemiology
EPID 891: Epidemiology Doctoral Seminar
EPID 893: Pharmacoepidemiology Seminar
EPID 894: Infectious Disease Seminar
EPID 895: Seminar in Oral Epidemiology
EPID 897: Advanced Seminar in Cardiovascular Research

V. TUTORIALS AND RESEARCH SECTIONS

EPID 799: Special Studies in Epidemiology
EPID 883: Teaching Experience in Epidemiology
EPID 886: Readings in Epidemiology
EPID 889: Topics in Epidemiology Seminar
EPID 900: Epidemiology Practice
EPID 905L: Epidemiology Laboratory Practice
EPID 910: Research in Epidemiology
EPID 992: Master's (Non-thesis)
EPID 994: Doctoral Research and Dissertation

VI. STUDENT RECOMMENDED NON-EPID COURSES

BIOL 445 Cancer Biology
BIOS 511 Introduction to statistical Computing and Data Management
BIOS 641/2 Quantitative Methods for Health Care Professionals I and II
BIOS 664 Sample Survey Methodology
BIOS 665 Analysis of Categorical Data
BIOS 667 Applied Longitudinal Data Analysis
BIOS 767 Longitudinal Data Analysis
DPOP 806 Pharmaceutical Policy
ENVR 468 Advanced Functions of Temporal GIS
GEOG 541 GIS in Public Health

GRAD 704 Effective Presentation Skills
GRAD 810 Communication in the American Classroom
HBEH 753 Qualitative Research Methods
HBEH 762 Multilevel Modeling with Applications to Health Behavior
HBEH 815/6 Foundations of Health Behavior I and II
HPM 757 Health Reform: Political Dynamics and Policy Dilemma
HPM 890 Pharmaceutical Industry
JOMC 560 Medical and Science Journalism
MBA 822 Negotiations
PATH 713/714L Molecular and Cellular Pathophysiological Basis of Disease:
Mechanisms of Disease
PATH 715/716L Molecular and Cellular Pathophysiological Basis of Disease: Systemic
Pathology
PLAN 491 Introduction to GIS
PSYC 846 Multilevel Modeling
SOC1 711 Analysis of Categorical Data
SOC1 717 Structural Equations with Latent Variables
SOC1 718 Longitudinal and Multilevel Data Analysis
SOWO 916 Structural Equation Modeling
SOWO 917 Longitudinal and Multilevel Data Analysis

INDEPENDENT STUDY, INDEPENDENT RESEARCH, AND LAB PRACTICE REGISTRATION:

Independent study, independent research, and field training are options available to the mentor and the trainee to introduce individualized and flexible learning opportunities into a student's training path. The distinctive features that define each of these are listed below:

Readings in Epidemiology (EPID 886) is a course organized between faculty and one student (or fewer than five students) with defined learning objectives, an evaluation, and credit hours to meet a student's training objectives outside/beyond the established courses and seminars. This independent study activity can include review of the substantive and/or methodologic knowledge base in a particular area, and/or their application. This course is not intended to support research hours. Students who wish to register for this course must also complete an **Independent Study Learning Agreement** (available on the Epidemiology Student Resources site on Sakai).

Independent Research (EPID 910) provides a mechanism for training opportunities based on active participation in research with faculty. It is based on defined learning objectives for this activity, their evaluation, and a pre-established number of credit hours. The student's time is allocated primarily to an active role in research activities as part of a research team, as opposed to a review of the scientific background and/or knowledge base pertinent to the research.

Independent research is a training activity for academic credit. Remuneration as a research assistant for the student's participation in a research project related to this learning activity is an option, to the degree that the objectives and responsibilities for the independent research and the research assistant activity are specified and do not overlap. Both the learning activity and its objectives, as well as the funding implications, must be discussed explicitly at the outset of this activity and established in writing.

Epidemiology Practice (EPID 900) provides credit for the required Master's practicum experience. The Master's practicum provides students with the opportunity to apply their academic training to experientially address master's competencies in the context of public health practice. All students will register under the faculty practicum coordinator.

Epidemiology Lab Practice (EPID 905L) is any learning activity conducted off-campus, designed to support the student's training goals. Such activities are either formal training activities listed on the curriculum or designed specifically for the student with approval by the mentor, specifying learning objectives, number of credit hours, an evaluation, and the student's responsibilities.

A student's participation in independent study, independent research, or lab practice requires approval by the supervising faculty.

INFORMATION RELEVANT TO ALL EPIDEMIOLOGY STUDENTS

DEPARTMENTAL COMMUNICATION

Student Email Accounts

Much of the communication between students and the Academic Coordinator, faculty and other offices/individuals on campus will be through email. Each student is provided with a departmental email account upon enrollment. These email addresses are made available to UNC faculty, staff and other students. Frequently, students have other email accounts on campus and elsewhere; however, you should be aware that **your UNC account is the one that will be used for communications from faculty and staff.**

Communications to the entire list of students will take place via an email listserv. The address for sending messages to this list is: epidstudents@unc.edu.

Since UNC email is the primary mode of communicating information to students, it is imperative that your email be checked regularly. Students are held responsible for information disseminated via email, including summers and holidays.

Listservs (electronic mailing lists)

A few other listservs are available for student use. Within the EPID department, job announcements for research and teaching assistantships are sent to the "epidjobs" listserv. Incoming doctoral students are automatically subscribed to this listserv so that they will be aware of opportunities.

Information on seminars, workshops and doctoral defenses is disseminated via the "epidsems" listserv. All incoming students are automatically subscribed to the "epidstudents" and "epidsems" listservs. Details on the listservs can be found on the department's website.

THE ADVISING AND MENTORING PROCESS

Academic Advisor Assignment

The Academic Coordinator for the Department of Epidemiology is the academic advisor for all students during their time in the program.

Faculty Mentor Assignments

When a student is admitted to the EPID program, a faculty mentor assignment is made based on factors such as mutual interests and faculty mentoring load. Within the student and faculty population, there is great diversity in work styles. While in most instances the original assignment will prove to be a satisfactory and fulfilling relationship, there are reasons why these first matches may not always be the best pairing to meet the needs of the student. Therefore, there may be times when the student and/or the mentor feel that the student's needs may be better served by another mentor. Change is encouraged to facilitate the best possible mentoring experience.

Changing Mentors

Once the student identifies a new faculty member who is willing to serve as their mentor, the student asks the faculty member to sign a **Mentor Assignment/Change form** (available on the Epidemiology Student Resources Sakai site) indicating that they have agreed to mentor the student. This form is then filed with the Academic Coordinator.

A student who is considering a change in mentors is encouraged to discuss the situation with their current mentor. If for any reason the student is not comfortable doing this, s/he should consult with the Academic Coordinator about how to proceed, depending on the specific circumstances. When a change in mentors is made, the student should notify the now-prior mentor as a matter of courtesy. However, if this proves to be a problem, the Academic Coordinator should be asked to assist.

Communication

The mentor/mentee relationship benefits from good communication. Establishing expectations of both the faculty member and the student at the outset of the mentor/mentee relationship is a major component of good communication. Listed below are some suggestions for topics for discussion between mentor and mentee, beginning at the first meeting:

- preferred method of communication (telephone, email, walk-in, sign-up at door, schedule appointment)
- frequency of meetings
- responsibility for initiation of meetings
- how the mentor will communicate which of his/her suggestions are recommendations and which are requirements
- how much course planning should be done with the mentor (i.e., is it necessary to meet with the mentor prior to registration for courses)
- who will be responsible for ensuring that the student has met all degree requirements
- to what extent the mentor will assist in identifying funding opportunities
- to what extent the mentor will assist in identifying master's paper and/or dissertation topics
- what the mentee's expectations are in terms of faculty involvement in identifying topics and funding opportunities
- what the mentor's expectations are in terms of professional development opportunities (i.e., manuscript review, proposal writing, data analysis, literature reviews, presentations at meetings, etc.)
- how often the student and mentor should meet to assess the student's progress, and in what manner that assessment will be made
- how often the student and mentor should meet to assess the appropriateness of the mentor/mentee match, and in what manner that assessment should be made

Individual Development Plan

The Graduate Studies Committee encourages faculty to work with their mentees to complete an Individual Development Plan (IDP) at the start of each academic year. An **IDP template** is available on the Epidemiology Student Resources site on Sakai. Students are encouraged to

prepare a draft IDP and then meet with their mentor to discuss and refine it. Topics for inclusion on the IDP include:

- perceived strengths and weaknesses
- progress made in the previous academic year (i.e., courses, presentations, degree milestones)
- plans for the upcoming academic year
- remediation plan (in cases of Qualifying Exam failure)
- progress toward thesis
- steps taken toward post-graduation career plans (e.g., CV preparation, networking, job search)

Process Evaluation

It is recommended that the mentor and mentee regularly assess the mentoring relationship to evaluate the appropriateness of the match and to identify areas where improvement can be achieved. Students and mentors are encouraged to discuss openly the concerns of either party and to try to negotiate solutions to any problems.

COURSE REGISTRATION

For information about online course listing and registering for classes, please refer to the Office of the Registrar website at registrar.unc.edu/. The following section highlights questions frequently asked of Student Affairs.

Dropping Courses

Graduate students may drop courses using the registration system during the first two weeks of classes. After the second week of classes and before the end of the twelfth week of classes, graduate students must obtain a Registration/Drop/Add Form from the Academic Coordinator (see the University Registrar's Calendar for the Last Day for Graduate Students to drop courses). The Academic Coordinator will sign off as the advisor. Registration changes requested after the last day for graduate students to drop courses require approval of the Graduate School.

Important: Students receiving tuition awards must remain at the same tuition level throughout the semester. Any registration changes after the "last day to add" may result in a tuition change that is not covered by the in-state tuition award. Consult with the Academic Coordinator before making changes.

Exemption from Required Courses

Exemption from any course requirement is on the basis of equivalent work. A student seeking exemption from, or substitution for, a School of Public Health core requirement must submit for approval the School of Public Health's Core Course Exemption/Substitution Application Form (<http://sph.unc.edu/students/academic-and-policies/>). To be exempted from a departmental requirement, the student submits a departmental exemption request form to the Academic Coordinator. The petition should describe clearly the equivalent coursework and/or experience. This form is available on the Epidemiology Student Resources site on Sakai.

Exemptions may be granted for introductory substantive courses on an individual basis. We expect both the course instructor and Program Area Leader to consider such requests carefully to ensure that the student is well prepared should s/he elect to take the Substantive QE in that area. We expect our students to meet the substantive epidemiology course requirements by choosing topical areas, and course levels within a program area, that complement the knowledge base that they bring to the program.

HUMAN SUBJECTS REVIEW

All students – without exception - must complete training in the protection of human research subjects. The website for this training is <https://research.unc.edu/human-research-ethics/getting-started/training/>. Students should select training in either Group 1 or 2. **Group 3 does not suffice.**

Students may obtain a copy of their CITI training verification online at https://acap.research.unc.edu/research_training/?event=administration.certificates.pgCertSelectTraining.

The “Responsible Conduct of Research” course offered by the N.C. Translational and Clinical Research Sciences (TraCS) Institute during the summer can be taken in lieu of the CITI training. This course is typically announced via email by the TraCS program.

INFORMATION SPECIFIC TO MSCR DEGREE STUDENTS

COMPETENCIES FOR THE MSCR

The MSCR program is an interdisciplinary research degree program housed within the Department of Epidemiology in the Gillings School of Global Public Health. The program is designed to develop the skills necessary for a successful career as a principal investigator and collaborator in clinical research. Competencies guide our curriculum planning process and serve as a measure against which student achievement is assessed. Listed below are the degree-specific competencies for the MSCR program:

- 1) Clinical research study design: Identify testable research hypotheses; develop appropriate study designs with minimal bias; identify appropriate target populations.
- 2) Fundamentals of data analysis: Develop appropriate data analysis plans for research hypotheses; implement basic statistical analyses including multivariable regression; understand sample size and power calculations.
- 3) Grant proposal development: Develop a proposal for clinical/translational research suitable for submission to the National Institutes of Health or research foundation.
- 4) Interdisciplinary collaboration: Develop skills for collaboration with research methodologists, including biostatisticians, and for working in teams (team science).
- 5) Project oversight and management: Training in skills needed to implement a research project, including hiring of appropriate team members, developing and managing budget, overseeing project, ethics approvals, and regulatory reviews.
- 6) Oral and written presentation: Effectively present research findings orally to peers, lay persons, and the media; Write clearly and succinctly for scientific publication and research proposals.
- 7) Professional development: Demonstrate knowledge of the academic research environment, sources of research support, and professional advancement. Demonstrate the use of strategies to improve professional effectiveness, such as time management, leadership skills, and management skills.

STUDENTS

The program is designed for persons planning a career as a clinical or translational investigator who will assume leadership roles in research projects and research teams. Applicants must have completed training in a primary substantive research or clinical area. The MSCR is intended to complement the substantive training in these primary substantive areas.

Applicants must have a doctoral level professional degree (MD, PharmD, PhD, DDS, nurses with PhD, DVM. etc.) or extensive health professions experience (RN's, PA's). At the time of enrollment in the MSCR, participants will simultaneously be residents, clinical fellows, post-doctoral fellows, or junior faculty at UNC or Duke University. We anticipate that each student will already be affiliated with a "home academic program", reflecting the funding source (e.g., T32 or K12 funding), training program (e.g., post-doctoral fellowship) or department.

DESCRIPTION OF THE PROGRAM

The program is designed to be completed over 2 academic years. **The program requires a minimum of 36 credit hours** and is consistent with requirements in the Department of Epidemiology. Students must be registered for classes in a minimum of three semesters.

The program is intended for a broad range of clinical and translational researchers. Core courses in the curriculum will address issues pertinent to all areas of clinical and translational research.

Students are required to take 3 credit hours from among the substantive courses offered by the department's various program areas (i.e., pharmacoepidemiology, infectious disease epidemiology, cardiovascular epidemiology, injury epidemiology, etc.). In addition, MSCR students enroll in 7 credit hours of electives from any existing Gillings School of Global Public Health graduate level courses. Students interested in substituting a graduate level course outside of the Gillings School toward this 7-credit total should send an email request to the Academic Coordinator for review by the MSCR Program Director for consideration of approval. Please include the course syllabus with the request.

The program will rely heavily on experiential learning, in addition to didactic sessions. Assignments in the core courses will be geared toward practical study-related issues. Whenever possible, large classes will include small group sessions to provide greater opportunity for faculty interaction.

The program requires two significant products for the MSCR degree. A Master's Paper will be required of all students. The paper will be original work in the form of primary data collection and analysis, secondary data analysis, or systematic review (or meta-analysis) of previously conducted studies. The Master's Paper will be supervised by the student's mentor from their clinical or research program and a mentor in the Department of Epidemiology. Content of Master's Papers will be approved by the epidemiology faculty mentor. The Master's Paper is expected to be of publication quality (and not published) at the time of completion.

In addition to the Master's Paper, students will be expected to complete a grant proposal targeted to an NIH, foundation, or other appropriate funding source. The proposal may be for a career development award or an investigator-initiated research grant. The research proposal will be developed within the context of EPID 726.

Clinical and translational research is conducted in multidisciplinary, collaborative teams. The program is designed to give these future investigators the skills to succeed in the current environment of clinical and translational research. Collaboration will be fostered through formal and informal group exercises, peer review of colleagues' work, and group discussions of ongoing research. Participants will develop the skills to design sophisticated clinical and translational research studies, in combination with the skills to conduct and lead the research projects.

Mentors and Academic Advisor

In addition to the designated mentor in the Department of Epidemiology, all participants in the MSCR program are to have mentor(s) in their home departments or training programs (e.g. their clinical department, research department, or other program). At least one mentor must have experience in clinical research. We will involve the mentors directly in the student's training,

namely in the grant writing course (EPID 726) and the Master's Paper. For example, in EPID 726, mentors will be expected to give meaningful feedback on the proposals as they are being developed, along with the advice and guidance of the course faculty. An established mentor relationship will be a requirement for enrollment in EPID 726.

The Academic Coordinator for the Department of Epidemiology is the academic advisor for all students during their time in the program.

SUMMARY OF DEGREE REQUIREMENTS AND SCHEDULE FOR THE MSCR

For a checklist of degree milestones, as well as a sample schedule and timeline, go to the Epidemiology Student Resources site on Sakai.

Degree Requirements

Course #	Course name	Credits	Academic Term
Public Health Foundational Knowledge		3	
SPHG 600	Introduction to Public Health	3	Fall 1, 2, Summer
MSCR Core		20	
EPID 711	Clinical Measurement/Evaluation	3	Fall 1
BIOS 641	Quantitative Methods for Healthcare Professionals I	4	Fall 1
EPID 804	Design of Clinical Research	4	Spring 1
BIOS 642	Quantitative Methods for Healthcare Professionals II	4	Spring 1
EPID 726	Epidemiology Research Methods	3	Fall 2
EPID 790	Intervention Epidemiology	2	Fall 2
MSCR Electives		10	
EPID ###	Any substantive epidemiology course ³ of at least 3 credits	3	Any term
	Any SPH graduate level courses, or approved graduate level courses	7	Any term
MSCR Milestone 1: Comprehensive Examination			
	MSCR Comprehensive examination		April, Year 1
MSCR Milestone 2: Thesis or approved substitute		3	
EPID 992	Master's paper development, submission, and assessment	3	Final Term
MSCR Degree Total		36	

Sample Schedule

Course #	Course name	Credits	Academic Term	Degree Requirement
EPID 711	Clinical Measurement/Evaluation	3	Fall 1	Core
BIOS 641	Quantitative Methods for Healthcare Professionals I	4	Fall 1	Core
SPHG 600	Introduction to Public Health	3	Fall/Spring 1 Summer	Public Health Found. Know.
Semester 1 Subtotal		10		
EPID 804	Design of Clinical Research	4	Spring 1	Core
BIOS 642	Quantitative Methods for Healthcare Professionals II	4	Spring 1	Core
	Any SPH graduate level course, or approved graduate level course	3	Spring 1	Elective
Semester 2 Subtotal		11		
EPID 726	Epidemiology Research Methods	3	Fall 2	Core
EPID 790	Intervention Epidemiology	2	Fall 2	Core
EPID ###	Any substantive epidemiology course ³ of at least 3 credits	3	Fall 2	Elective
	Any SPH graduate level course, or approved graduate level course	1-3	Fall 2	Elective
Semester 3 Subtotal		9-11		
	Any SPH graduate level course, or approved graduate level course	3	Spring 2	Elective
EPID 992	Master's paper development, submission, and assessment	3	Spring 2	Master's paper
Semester 4 Subtotal		6		
MSCR Degree Total		36		

RESEARCH GRANT PROPOSAL

All MSCR students are required to complete a research grant proposal. This proposal may be for a career development award or an investigator-initiated research grant. Most proposals will be in the form of an NIH or similar type of grant. However, foundation grant proposals are also acceptable. Although not a formal requirement of the program, it is strongly encouraged that the research grant proposals are submitted to a funding agency. The research proposal will be developed in the context of EPID 726.

THE MASTER'S COMPREHENSIVE EXAMINATION

The Master's Comprehensive Examination is a formal requirement of the Graduate School and is covered by the campus Honor Code. The student must be enrolled at the time of the examination.

Purpose:

The MSCR Comprehensive Examination is intended to provide an opportunity to demonstrate mastery of basic clinical research concepts and methods and to diagnose any major areas of deficiency. A passing score of 70% on the examination is a requirement for the MSCR degree.

Timing:

The MSCR Master's Comprehensive Examination is offered in the spring of each year. Generally, students are expected to complete the examination at the end of their first year of study.

Format:

The examination is offered as a take home examination. Students may use textbooks and class notes in completing the examination.

Report of Outcome

Within 3 weeks of the examination, notification of the outcome is communicated to the student by the MSCR Comprehensive Examination Committee of the Graduate Studies Committee.

A student who fails the examination is required to consult with her/his mentor and the Academic Coordinator and conduct an in-depth review of diagnostic information related to his/her performance and any additional feedback or advice from the MSCR Program Director. Following this review, the student submits a brief report to the Graduate Studies Committee, with a copy to the mentor and the Academic Coordinator, assessing the reasons for the sub-standard performance and outlining an itemized plan for remedial action, which should include an Individual Development Plan (IDP). This analysis and plan are due to the Academic Coordinator within one month of the report of the examination outcome unless a longer time is agreed to by the Chair of the Graduate Studies Committee. Unless a different timing is recommended by the Graduate Studies Committee, the student must obtain a grade of Pass the next time MSCR Comprehensive Examination is offered in order to remain in the master's program.

Appeal of Failure

An appeal of a failing report is considered by the Graduate Studies Committee.

An appeal must be submitted to the Academic Coordinator within 3 weeks of receiving the official notice of the examination grade. Appeals must be in the form of a written justification and should be presented in such a way that the appeal can be considered without revealing the identity of the student involved. The appeal should be self-contained (other than references to standard textbooks or examination materials).

Students are expected to decide on their own whether to appeal an examination outcome. The examination can be discussed with the mentor or other faculty members. Appeals are regarded as part of the examination, and therefore subject to the Honor Code. The appeal must be the student's own work and be accompanied by a signed pledge. To preserve anonymity, the pledge will be separated from the appeal itself and retained by the Academic Coordinator.

The GSC will select an Appeal Committee to serve on an ad hoc basis.

The Appeals Committee will review the appeal materials without knowledge of the student's identity. To preserve anonymity, all communication between the student and the Committee will take place through the Academic Coordinator until the appeal has been decided. The Appeal Committee will bring the results of its review to the next scheduled GSC meeting for discussion. In reaching its decision the Committee will award full credit to answers that are judged to be equally as good as those originally proposed.

The GSC will review the appeal results and reach a final decision. The GSC decision is final with respect to the substantive issues. The final GSC decision will be communicated to the student within 6 weeks of submission of the appeal. The student may appeal to the Department Chair only on grounds of alleged irregularities in procedure.

THE MASTER'S PAPER

The master's paper is a thesis substitute and is a major requirement for the MCSR degree. The purpose of this capstone experience is to provide students an opportunity to synthesize, integrate and apply knowledge and skills learned in coursework and other learning experiences and require students to demonstrate attainment of program competencies. Students are challenged to apply their clinical research training to a specific issue and to demonstrate scientific writing skills.

The paper is filed with the Academic Coordinator and is available for student and faculty reference.

While work on the master's paper may progress over multiple semesters, the final paper, associated master's paper hours (EPID 992) with epidemiology faculty mentor and accompanying documentation should be submitted in the semester the student is completing the degree requirements. **No further degree coursework is permissible after the submission of the master's paper.**

Master's Paper Committee

Development of the master's paper is supervised by a committee consisting of a master's paper epidemiology faculty mentor and a second reader (usually the substantive mentor from the student's home department or program).

Content and Form of the Master's Paper

In carrying out the project, the student will be expected to select a scientifically relevant, feasible topic; review the medical literature; formulate an informative study question; and complete the relevant data analysis to address the study question. Master's papers may address a wide variety of clinical issues, from pharmacokinetics to health behavior, depending on the student's needs and interests. Formalized systematic reviews and meta-analyses are acceptable as Master's papers. Submission of the Master's paper for publication is expected, but not a formal requirement. The topic and format of the master's paper should be approved by the epidemiology faculty mentor and the substantive mentor.

Following approval of the final version by the two committee members, the completed master's paper is submitted to the Department as a scientific report formatted as a manuscript for publication. The Master's paper also requires a specific cover page and binding.

Identifying a Master's Paper Topic

Selecting an appropriate topic can sometimes be a stumbling block for students. Although the epidemiology faculty and substantive mentors will assist in topic identification, it is the student's responsibility to initiate the process by offering some preliminary ideas.

Human Subjects Review

Please refer to section relevant to all students for specific IRB training requirements [above](#).

All proposed master's paper research must be submitted to the Public Health or Biomedical Institutional Review Board (IRB) as soon as the project has been approved by the mentor and reader (see above). This applies to all master paper proposals, whether sponsored or not sponsored. Since the master's paper is a research activity that takes place under the leadership of the student with support from a mentor, safeguarding the ethical conduct of this research activity is a responsibility shared by the student.

Please note that even if a research activity has been approved previously, whether at UNC or elsewhere, specific IRB approval for the Master's paper must be obtained.

Guidance for any IRB action required for student research can be found here ohre.unc.edu and guidance for any IRB action required for student research is also in the "*IRB Guidance for Student Research and Class Projects*" document found on their [IRB Guidance Information](#) web page. (Refer to Appendix VIII.) Registration of Master's paper proposals follows the rules for IRB action presented on the website referred to above. The student is listed as the lead investigator for the research activity and a faculty mentor is identified who holds ultimate responsibility for ensuring that this project complies with all University, regulatory, and fiscal requirements.

Upon receipt of IRB exemption or approval, the student must complete the Verification of Compliance with Institutional Review Board Requirements form (available on the Epidemiology Student Resources site on Sakai). **A copy of the IRB committee's decision must be attached to the form. In addition, the title page of the master's paper must reflect the date of IRB approval (or exemption).**

The requirement to submit an IRB application may be waived if the work covered by an existing IRB approval from a parent study, the student is named on the parent study IRB application, and the student has previous experience submitting IRB protocols as a Principal Investigator. Please contact the Academic Coordinator in writing if you are requesting a waiver.

See web site at ohre.unc.edu.

Data Use Agreements

If data are used for the master's paper that are not publicly available, the IRB and the Department require a data use agreement. A sample form is available on the Epidemiology

Student Resources site on Sakai. This form should be signed by the Principal Investigator of the study that provides access to the data, or the person legally authorized to release it.

Typical Schedule for Completing the Master's Paper

Sufficient time should be allowed for the following:

- approval of the topic and format of the paper
- a thorough first review of the entire paper by both committee members;
- revision time required by the student;
- a second review by the committee members, at least three weeks prior to anticipated date for final approval of the complete, revised Master's paper, to permit final modifications that may be requested.

In preparing this schedule, the student should note Graduate School deadlines for the desired graduation date. Note that the master's paper is due BEFORE the end of the semester in which you plan to graduate. See registrar.unc.edu/academic-calendar/.

Format and Submission of the Master's Paper

The master's paper is not a thesis, but rather a "thesis substitute." Thus, many of the formal Graduate School thesis requirements do not apply. Specifically, there is no final oral examination or defense of the master's paper, and the paper itself is not filed with the Graduate School.

- **Formatting Guidelines:** Use Arial or Times New Roman font; use a type size of 11 or 12; page numbers centered on the bottom of the page in a footer; margins of left margin of at least 1¼ inch; other margins at least one inch. The Graduate Schools handbook, "A Guide to the Preparation and Submission of Theses and Dissertations," does not apply since this is not a formal thesis.
- The cover of the paper must be labeled with the student's name and the title of the paper. Students need to follow the exact format of the sample cover page found on the Epidemiology Student Resources site on Sakai.
- **Funding sources should be acknowledged on the title page in a statement such as:** "This research was supported in part by a grant from [name of institution]." Disclosure statements must also be added within the document, as applicable to potential conflicts of interest related to individual authors' commitments and project support. If there are none, this should be specified, e.g., "the author(s) have no conflicts to declare."
- **One electronic copy of the Master's paper is submitted to the Academic Coordinator** in accordance with the University schedule. This is the official copy and must carry the signatures of both members of the student's master's committee on the title page, as well as date of IRB approval. Copies of the final paper are also given to the members of the student's committee, if desired.

- Once the master's paper is complete, a "Report of Approved Substitute for Master's Thesis" form must also be filed with the Academic Coordinator. Please see the "Master's Paper Report" section below.

Students must be registered for 3 credit hours of EPID 992 (with their epidemiology faculty mentor) at the time they submit their master's paper. **Students should not submit their master's paper until the semester they are completing all degree coursework and are planning to graduate.**

Master's papers are kept in EPID Student Services and are available to students and faculty for reference.

Master's Paper Report

When the master's paper has been completed and approved by the student's committee, a "**Report of Approved Substitute for a Master's Thesis**" must be completed by the student and signed by the mentor. This report completes the student's master's degree program and must be submitted to the Academic Coordinator along with the final, signed, and bound copy of the Master's Paper. This form can be found at: <http://gradschool.unc.edu/forms/>. It is filed with the Graduate School and verifies completion of this requirement. **The report and paper should be submitted during the student's last semester.**

APPLICATION FOR GRADUATION

To be eligible for graduation in a given semester, students must apply for the degree early in that semester. Students need to apply for graduation in ConnectCarolina through their Student Center. Deadlines for applying for graduation in a given term can be found on the [Graduate School's](#) website. If a student fails to graduate in the term applied for, s/he must re-apply; no prior application will suffice.

QUESTIONS

Questions related to curriculum aspects of the program should be directed to Dr. Wayne Rosamond, MSCR Program Director, wayne_rosamond@unc.edu.

Questions related to administrative aspects of the program should be addressed to Bretney Waller, Academic Coordinator, bwaller@unc.edu.