



College of Public Health
Department of
Epidemiology and Biostatistics
Masters of Science in Public Health (MSPH)
Guidelines

Overview

The MSPH program in the Department of Epidemiology and Biostatistics is intended for students who wish to explore a topic of Public Health importance in-depth using Epidemiologic and/or Biostatistical methods. This process helps prepare students for a career in research by strengthening skills in planning, executing, and presenting a research study. Students apply the tools and knowledge learned in their required coursework to a thesis project. The student must defend his/her thesis in an open public forum. Students who have completed our program have successfully obtained professional positions in Colleges, Universities, private sector research firms, the health care businesses and industry as well as local, state and national Government and Non-Government Organizations.

Epidemiology Program

The MSPH program in epidemiology is intended for students with a background in life science and a strong interest in epidemiologic research. This program will provide students a solid quantitative training in epidemiologic research methods, such as systematic gathering, analysis and interpretation of epidemiologic study data. Students will gain experience in the development, preparation and presentation (defense) of a formal research project (thesis). This program will prepare students for careers requiring advanced epidemiologic research training.

Biostatistics Program

This program is intended for students with a strong quantitative background. The goal of the MSPH Program in Biostatistics is to provide students a thorough training in Biostatistical methods and the application of these methods to a formal research project (Thesis). The program will provide students with knowledge in statistical theory and various computational methods applicable to public health research. Through advanced coursework and completion of a thesis, students will develop mastery in one or more statistical methods as demonstrated in their thesis. The MSPH in Biostatistics prepares students to fulfill a primary or shared responsibility for the handling of quantitative and computational aspects of research projects, ranging from study design, data collection and management, developing analysis plans, conducting analyses and reporting findings.

Advising and Supervisory Committee

Students entering the MSPH program will be assigned an initial advisor to assist in selection and sequencing required coursework. During the student's first one and one-half years of coursework, the student should investigate departmental faculty members' research interests via the EPB Faculty website pages, faculty seminars and through personal contacts with the program faculty members. Students must select a thesis topic in line with a faculty member who is willing to serve as the student's major professor. The Major Professor of thesis committee must be a full-time EPB departmental faculty member with a doctorate degree in the student's program of study (Epidemiology student must have an Epidemiology faculty member as Major Professor and Biostatistics students must have a Biostatistics faculty member as Major Professor). After an eligible faculty member has agreed to serve as the Major Professor, a thesis committee will be identified and established with recommendation and guidance of the major professor. All members of the committee must be credentialed within the College of Public Health. A *minimum* of 3 members serve on the thesis committee. (Epidemiology students must have a departmental Biostatistics faculty member on their committee). Individuals from outside the department may serve as a committee member or as a co-Major Professor. Thesis committees must be approved using the **MSPH Student Supervisory Committee Appointment Form** found on the COPH Academic and Student Affairs "Forms" Website: <http://health.usf.edu/publichealth/forms.html> .

After the committee is approved the student is permitted to register for thesis credit hours (PHC 6971). The committee may require the student to enroll in additional coursework as the selected topic of research develops.

Before any research is started the student must complete all necessary research compliance documentation following college and university protocol found on USF and COPH research pages. The committee will assist in the development of the research study and will approve the final thesis defense and document. Whenever a new committee member is appointed or a change is made to an existing committee, it is the responsibility of the student to submit the required, signed, committee change form. When the student has completed his/her research and thesis a defense of the research will be scheduled on a date approved by all members of the thesis committee. The defense will be announced two weeks prior, and is open to the public. After a successful thesis defense students must submit the final document to the Graduate School electronically. Hard copies of the thesis should be submitted to the department and to members of the committee.

MSPH Requirements

Prerequisite training

MSPH students are required to have adequate mathematics and computer background coursework and training, appropriate for the desired field of study, prior to entering the program.

Coursework

Required coursework is outlined in the programs offered pages of the College Catalog. In the event of a program requirement change, students may elect to follow the program current in their year of entry or any subsequent posted program.

Comprehensive Examination

EPB Students in the MSPH program are required to successfully pass the Epidemiology (PHC 6000), Biostatistics I (PHC 6050) and one additional Core area exam section.

Additional Requirements prior to Enrolling in Thesis hours

In addition to completing the required coursework and passing the college-wide MSPH comprehensive examination, students in the MSPH program are required to form their thesis committee (and submit the signed paperwork) prior to enrolling in thesis hours.

Research Requirements

It is the responsibility of the student to complete the necessary research compliance requirements prior to completing any research. Prior approval by the student's committee, and by the Institutional Review Board (IRB) at the University of South Florida is required. The full policy for the Human Research Protection Program (HRPP) can be found at the University and College research websites:

<http://www.research.usf.edu/cs/irb.htm>

<http://health.usf.edu/publichealth/officeresearch/index.htm>

Students should consult these web pages often and thoroughly for updates regarding university and college policies and procedures. Students who do not obtain the necessary reviews and approvals cannot use the work for fulfillment of thesis requirements.

Graduation

Students must be enrolled in 2 credit hours the semester in which they graduate.

MSPH Timeline

Minimum time to complete coursework in the MSPH program is approximately 2 years attending full-time (9 credit hours fall and spring and 6 credit hours summer). Since incoming students come from diverse backgrounds and have varying degrees of coursework and experience, students in the MSPH program may require supplemental coursework in their selected area of thesis research.

| | Year 1 | Year 2 | Year 2+ |
|---|---|---|---|
| Student with initial advisor | <ul style="list-style-type: none"> • Course selection and sequencing | | |
| Student | <ul style="list-style-type: none"> • Successfully complete required coursework • Explore Faculty members research interests | <ul style="list-style-type: none"> • Identification and selection of Major Professor • Continued coursework • Comprehensive Exam • IRB/Human Subject documents related to Thesis submitted and approved • Thesis committee form submission | <ul style="list-style-type: none"> • Registers for Thesis hours • Regularly reports progress • Completes research and submits document to committee for approval • Arranges date and time for thesis defense • Successfully Defends Thesis • Completes and finalized Thesis document and submits electronically to Graduate School by posted deadline |
| Student with Major Professor | | <ul style="list-style-type: none"> • Major Professor Agrees to serve • Identify and narrow Thesis Research Topic | <ul style="list-style-type: none"> • Meet regularly to discuss progress |
| Student with Major Professor and Thesis Committee | | <ul style="list-style-type: none"> • Approval of students final plan of study / coursework • Approval of final thesis proposal | <ul style="list-style-type: none"> • Thesis defense date and time set • Attend Thesis defense • Concur successful defense • Approval of final Thesis document |

Thesis

The thesis is a major research project that requires long range thinking, time management, adaptability and continuous monitoring of forward progress. Thesis research projects develop over time and can be depicted in stages of progress. Using guidance and input from the thesis committee students can systematically advance their thesis research projects through stages from development and through completion. Following specific stages for thesis research can facilitate forward progress in development of a topic and research question, the planning of the study, and completion in a methodical progression. The following are sample outlines for stages of the thesis project:

Epidemiology example:

- 1. Planning**

- a. Literature review/Background
- b. Research question and hypothesis
- c. Methods

Compliance requirements must be completed before proceeding

- 2. Research**

- a. Data gathering/analysis

- 3. Compiling outcomes**

- a. Results
- b. Discussion
- c. Conclusions

- 4. Final phase**

- a. Thesis Defense
- b. Completion and approval of final document
- c. Submission of the final document to the Graduate School*

Biostatistics example:

- 1. Planning**

- a. Identify the research area of interest
- b. Literature review on the selected area
- c. Determine research topic

2. Research

- a. Fill the gap between your knowledge and the knowledge surrounding the topic
- b. Identify a specific statistical problem whose solution requires some modification of an existing method.
- c. Methodology development and testing
- d. Write up in thesis format

3. Final phase

- a. Thesis Defense
- b. Completion and approval of final document
- c. Submission of the final document to the Graduate School*

*It is essential that the thesis be submitted in electronic (PDF) format meeting all the requirements of the Graduate School. The Electronic Thesis and Dissertation (ETD) Resource Center provides excellent guidance in the procedure for completing and submitting your manuscript. Students are required to follow the format given in the Thesis and Dissertation Handbook. The University Graduate School guidelines are found online at: <http://www.grad.usf.edu/thesis.asp>. **This website has numerous tutorials and guides to assist you with the writing of your document.** It is the student's responsibility to follow the guidelines and meet all the college and university deadlines for submission of forms and documents.

Epidemiology and Biostatistics MSPH Summary

The MSPH program in the Department of Epidemiology and Biostatistics is a rigorous program that requires dedication to carry through the planning, development, execution and analysis of data in a public health research project. Through advanced level coursework and successful completion of a thesis, the MSPH program prepares students to fulfill a primary or shared responsibility in a career in research by experiencing all aspects of a research project ranging from study design, data collection and management, developing analysis plans, conducting analyses and the reporting of findings both in a formal written document (the thesis) and in a public presentation format (thesis defense). Students successfully completing the MSPH program leave with experience and training that enables them to pursue careers in a vast assortment of research fields or to apply to doctoral programs. Previous graduates of this program have found employment in medical, health and pharmaceutical research and development, clinical trials, in private sector firms and Government agencies such as the Centers for Disease Control, Pan American Health Organization, State and Local Health Departments. Many of our students have also continued their education and received Doctorates in Public Health areas. With dedication and the ability to adapt to the rigor of an in-depth research study, student in this program are well prepared for future accomplishments.