

Department of Epidemiology

Eric S. Johnson, MD, PhD
Professor and Department Chair
UNT Health Science Center
School of Public Health
Center for BioHealth-355
817-735-5029
eric.johnson@unthsc.edu

MPH in Epidemiology Academic Year 2010-2011

The epidemiology concentration is designed for students seeking to acquire skills in the fundamental methods of epidemiologic investigation and prevention in populations. Concentration courses emphasize basic and advanced epidemiologic principles and their application to current problems in public health and related disciplines. Students in the epidemiology concentration are expected to use appropriate methods to plan, implement, and conduct epidemiologic research. Students are also expected to critically evaluate research methodology to assess validity and potential sources of bias. Skills in computer use and statistics acquired in the public health program are used to analyze, interpret, and disseminate the results of epidemiologic investigations. For the culminating experience, students may choose between a thesis option or a comprehensive examination option. Students selecting the comprehensive examination option will complete 48 semester credit hours and students selecting the thesis option will complete 51 semester credit hours to earn the MPH degree. By the conclusion of the MPH program, a student in the epidemiology concentration will be able to:

- 1. Quickly assess a public health problem using quantitative and/or qualitative data.
- 2. Use relevant analysis for relevant study designs.
- 3. Understand the natural occurrence of disease and associated risk factors.
- 4. Understand the importance of ethical considerations in the conduct of epidemiological studies.
- 5. Identify, develop, apply and modify an appropriate research approach to an epidemiological problem based on constraints and available resources.
- 6. Identify and develop data collection strategies for the appropriate epidemiologic approach.
- 7. Implement appropriate study designs to an epidemiologic problem.
- 8. Review epidemiologic literature critically.

Epidemiology Curriculum (48 or 51 Semester Credit Hours)

CORE COURSES:			15 SCH
BIOS	5300	Biostatistics for Public Health 1	3 SCH
EOHS	5300	Environmental Health	3 SCH
EPID	5300	Principles of Epidemiology	3 SCH
HMAP	5300	Introduction to Health Management and Policy	3 SCH
SABS	5300	Theoretical Foundations of Individual & Community Health	3 SCH
REQUIRED COURSES:			15 SCH
BIOS	5310	Biostatistics for Public Health 2	3 SCH
EPID	5310	Intermediate Epidemiology	3 SCH
EPID	5312	Survey Methodology	3 SCH
EPID	5313	Database Management and SAS Programming	3 SCH
EPID	5314	Applied Data Analysis in Epidemiology	3 SCH

PRACTICE EXPERIENCE:			3 SCH
EPID	5397	Public Health Practice Experience	3 SCH

CONCENTRATION SELECTIVE COURSES: 12 SCH for Thesis Option or 15 SCH for Comprehensive Exam Option

Choose one from the following courses (applied to both thesis and comprehensive exam option)

EPID	5318	Chronic Disease Epidemiology	3 SCH
EPID	5320	Infectious Disease Epidemiology	3 SCH

Choose <u>three</u> from the following courses if completing the thesis option or <u>four</u> from the following courses if completing the comprehensive examination option

BIOS	5324	Data Management	3 SCH
EPID	5391	Special Topics in Epidemiology	1-3 SCH
EPID	5399	Independent Study in Epidemiology	1-3 SCH
EPID	6310	Advanced Methods in Epidemiology 1	3 SCH
EPID	6312	Advanced Methods in Epidemiology 2	3 SCH
EPID	6314	Experimental Methods in Epidemiology	3 SCH
EPID	6316	Molecular Epidemiology	3 SCH
EPID	6318	Epidemiologic Surveillance	3 SCH
EPID	6320	Social Epidemiology	3 SCH
EPID	6322	Nutritional Epidemiology	3 SCH
EPID	6324	Cancer Epidemiology	3 SCH
EPID	6326	Occupational Epidemiology	3 SCH

- Students may substitute an elective course not on this list only with prior written approval of their advisor.
- Courses not approved as substitutes will not be applied toward the degree plan.

CULMII	NATING EX	0-6 SCH	
EPID	5000	MPH Comprehensive Examination	0 SCH
	OR		
EPID	5395	Thesis	6 SCH

MPH students enrolled in the thesis as part of their degree plan are required to demonstrate that they are actively working toward its completion. This requires confirmed submission of written materials and on-going consultation with committee members within the first and subsequent semesters of registering for thesis credit. It is the responsibility of the student to maintain contact with their thesis advisor and committee members to assure satisfactory progress. MPH students choosing the thesis option but not making satisfactory progress as determined by their advisor may be required to take the comprehensive exam instead of the thesis or may be required to take additional courses to assure sufficient knowledge and skills needed to continue the research project. Any action taken as a result of not meeting the above expectations is subject to the discretion of the department chair.

When MPH students take the Public Health Practice Experience (EPID 5397), they must include field experience in the practicum which is comprised of 1) performing data collection defined as abstraction of records, coding, or medical chart review and abstraction or 2) data editing and analysis. All field experiences must include some element of data collection or working with raw data.