Epidemiology PhD Plan of Study
Molecular and Genetic Epidemiology
Effective Fall 2018

Core Curriculum			
CPH:6100	Essentials of Public Health	2 s.h.	Fall
BIOS:4120	Introduction to Biostatistics	3 s.h.	Fall, Spring, Summer
EPID:4400	Epidemiology I: Principles	3 s.h.	Fall, Spring, Summer
EPID:5241	Statistical Methods in Epidemiology	4 s.h.	Spring
EPID:5600	Intro to Epidemiologic Data Management and Analysis	3 s.h.	Fall
EPID:5610	Intermediate Epidemiology Data Analysis with SAS and R	3 s.h.	Spring
EPID:6050	Research in Epidemiology	3 s.h.	Fall, Spring Summer
EPID:6100	Writing a Grant Proposal	3 s.h.	Fall, Spring
EPID:6400	Epidemiology II: Advanced Methods	4 s.h.	Spring
CPH:7270	Principles of Scholarly Integrity: Public Health	1 s.h.	Fall, Spring
EPID:7400	Epidemiology III: Theories	3 s.h.	Fall odd years
Choose 1 of the following 2 courses:			
BIOS:6310	Introductory Longitudinal Data Analysis	3 s.h.	Fall
BIOS:6210	Applied Survival and Cohort Data Analysis	3 s.h.	Spring
Choose 1 of the following 2 courses:			
PATH:8133	Introduction to Human Pathology	4 s.h.	Fall
PATH:5270	Pathogenesis of Major Human Diseases	3 s.h.	Spring
Choose 1 of the following 2 courses:			
HHP:3500	Human Physiology	3 s.h.	Fall, Spring, Summer
MPB:5153	Graduate Physiology	4 s.h.	Fall
Total Core Course Requirements		42-43 s.h.	

Electives			
Strongly Recommended:			
EPID:7200	Teaching in Epidemiology	3 s.h.	Fall, Spring
See research interest area course section for requirements			
At least 3 s.h. of epidemiology courses (EPID) outside the interest area		3 s.h.	
Total Electives		26-28 s.h.	

(must be approved by advisor and PhD Plan of Study Committee)

Dissertation		
EPID:7000		10-18 s.h.
Total Dissertation		10-18 s.h.

Additional Requirements		
EPID:5925	Epidemiology Journal Club *(5 semesters required*)	0 s.h.
Epidemiology Seminar *80% attendance required each semester*		

Total semester hours required (minimum)	78 s.h.

Molecular Genetic Epidemiology Research Interest Area Electives

Students interested in molecular and genetic epidemiology will take the following two courses:

EPID: 6250	Genetics and Epidemiology	3 s.h.	Spring
EPID: 5560	Introduction to Molecular Epidemiology	3 s.h.	Spring

Students will choose at one of the following two courses Note if you take both the other can count towards recommend electives.*

EPID:6550	Epidemiology of Infectious Diseases OR	3 s.h.	Fall
EPID:6600	Epidemiology of Chronic Diseases	3 s.h.	Fall

Students will choose at one of the following three courses Note if you take more than one the others can count towards recommend electives.*

EPID:6920	Applied Administrative Data Analysis OR	2 s.h.	Fall
EPID:5214	Meta-Analysis of Epidemiologic Studies OR	3 s.h.	Spring odd years
EPID:6420	Survey Design and Analysis	3 s.h.	Spring

In addition, students will complete 14-15 s.h. from the following recommended courses. Students should select courses in consultation with their advisor to reflect their research interest area (e.g. infectious diseases, chronic diseases, pharmacoepidemiology, clinical epidemiology, hospital epidemiology, psychiatric epidemiology, or clinical investigation):

ANTH:3325	Human Evolutionary Genetics	3 s.h.	Fall – variable
ANTH:3326	Infectious Disease and Human Evolution	3 s.h.	Fall – variable
ANTH:3328	Molecular Genetics of Human Diseases	3 s.h.	Spring – variable
ANTH:3307	Modern Human Origins	3 s.h.	Fall odd years
ANTH:3308	Human Variation	3 s.h.	Variable
BIOL:3172	Evolution	4 s.h.	Fall,Spring
BIOL:4333	Genes and Development	3 s.h.	Spring
BIOL:3713	Molecular Genetics	4 s.h.	Fall
BIOL:3373	Human Population Genetics and Variation	3 s.h.	Spring
BIOL:4213	Bioinformatics	4 s.h.	Fall
BIOL:4373	Molecular Evolution: Genes, Genomes, and Organisms	3 s.h.	Spring
BIOL:3314	Genomics	3. s.h.	Spring
BIOL:5412	Fundamental Genetics	3 s.h.	Fall
BIOL:5320/GENE:5173	Computational Genomics	3 s.h.	Spring
BME:5320	Bioinformatics Techniques	3 s.h.	Fall
EPID:5550	Diagnostic Microbiology for Epidemiology	3 s.h.	Spring
EPID:6570	Infectious Causes of Chronic Disease	3 s.h.	Spring

EPID:6560	Hospital Epidemiology	2 s.h.	Spring odd years
EPID:6350	Nutritional Epidemiology	2 s.h.	Spring even years
GENE:6150	Genetic Analysis of Biological Systems	3 s.h.	Fall
GENE:6234	Basic Biostatistical Methods in Genetic Apps	1 s.h.	Spring
GENE:7191	Human Molecular Genetics	3 s.h.	Spring even years
HHP:4450	Genetic Basis of Disease	3 s.h.	Fall
MCB:6215	Transcription RNA	1 s.h.	Spring
MCB:6217	Epigenetics, Cancer & Mouse Models	1 s.h.	Spring
MCB: 6220	Mechanisms of Cellular Organization	3 s.h.	Fall
MCB:6225	Growth Factor Receptor Signaling	1 s.h.	Spring
MCB: 6226	Cell Cycle Control	1 s.h.	Spring
MCB: 6227	Cell Fate Decisions	1 s.h.	Spring
MCB: 6240	Inflam Cell Signl & Targeted Cancer Ther	1 s.h.	Fall
MICR:6260	Graduate Molecular Microbiology	3 s.h.	Spring
MICR:6279	Graduate Bacterial Diversity and the Human Microbiome	3 s.h.	Variable
PCOL:5135	Principles of Pharmacology	1 s.h.	Spring
PCOL:5136	Pharmacogenetics and Pharmacogenomics	1 s.h.	Spring
Total Emphasis Area Electives		23-24 s.h.	

Non-Interest Area Elective(s)	
At least 3 s.h. of epidemiology courses (EPID) outside the interest area	3 s.h.
Total Non-Interest Area Electives	3 s.h.

Dissertation		
EPID:7000	Dissertation	10-18 s.h.
Total Dissertation		10-18 s.h.

Additional Requirements		
EPID:5925	Epidemiology Journal Club *(5 semesters required*)	0 s.h.

Epidemiology Seminar 80% attendance required each semester

Total semester hours required (minimum) 78 s.h.