

# Summary of the Degree Requirements for the PhD in Epidemiology

## Required Courses:

- EPID 704: Socially Responsible Epidemiology
- EPID 705: Introduction to Logic and Probability Logic in Epidemiology
- EPID 710: Fundamentals of Epidemiology [EPID 711 may be substituted by clinicians]
- EPID 712: Readings in Fundamentals of Epidemiology
- BIOS 600: Principles of Statistical Inference **OR** BIOS 662: Intermediate Statistical Methods **OR** BIOS 650: Elements of Probability & Statistical Inference I
- EPID 715: Theory and Quantitative Methods in Epidemiology
- EPID 716: Epidemiologic Data Analysis
- BIOS 645: Principles of Experimental Analysis **OR** BIOS 663: Intermediate Linear Models
- EPID 718: Analytic Methods in Observational Epidemiology
- EPID 722: Epidemiologic Analysis of Time-to-Event Data
- EPID 726: Epidemiologic Research Methods
- EPID 994: Dissertation (Minimum of 6 credit hours)

## Additional Courses:

- SPHG 600: Introduction to Public Health (Required for all students who do not hold a prior PH degree; Exemptions are available for those with non-PH degrees from accredited SPHs)
- Epidemiology courses in substantive research areas: Minimum of two courses; consisting of 1.) a minimum of 2 credits in the student's program area of study and 2.) a minimum of 2 credits in an area (or areas) outside of student's program area of study (i.e., one 2 credit course, or two 1 credit courses)
- Advanced statistics course(s) as determined with mentor and specified by intradepartmental review committee (e.g., BIOS 664, 665 or 667, HBEH 762 [Modules 1&2], SOWO 916 or 917, SOCI 717 or 718). Note that intermediate level BIOS courses (i.e., 550, 662, 663) do not count as the advanced course.
- Other coursework as determined with mentor and intradepartmental review committee
- Other coursework as stipulated by program area guidelines

## Other Degree Requirements:

- Two research practicum experiences in the practical conduct of studies, as determined with mentor (may not be waived)
- One semester teaching experience in epidemiology
- Competence in statistical computing and data management (SAS)
- Competence in scientific writing
- Intradepartmental Review
- Presence on campus until after successful defense of doctoral proposal
- Preliminary Doctoral Examinations:
  - ◇ Preliminary Written Examination- The Doctoral Qualifying Examination consists of 2 components- Methods & Substantive.
  - ◇ Preliminary Oral Examination: On the dissertation proposal
- Specific questions on research area (at discretion of student's dissertation committee)
- Interim Doctoral Committee Meeting/Dissertation Close-Out Schedule
- Submission of a minimum of one manuscript from dissertation research to an external peer review mechanism
- Completion of Dissertation
- Final Defense of Dissertation
- Submission of Dissertation to the Graduate School.



### **Sequencing of Core Methods Courses:**

- ✓ EPID 710/712, 715/716, 718, and 722 act as a sequence.
- ✓ Students may take EPID 726 in Year 2 depending upon readiness. Prior approval of instructor and mentor is needed.
- ✓ BIOS 600 and 645 act as a sequence and BIOS 662 and 663 act as a sequence.
- ✓ Both components of the preliminary written examination (Doctoral Qualifying Exam) must be passed before the oral examination (proposal defense).
- ✓ Additional coursework is planned according to student needs.

### **Exemption from Core Methods Courses:**

Doctoral students entering with prior training in epidemiology may be exempted from some of the core methods requirements. Exemptions are handled on an individual basis, and course sequencing for such students will be planned individually. EPID 715/716 may not be exempted.

\*The following courses serve to satisfy the requirements for a course in a substantive research area:

EPID 625:	Injury as a Public Health Problem
EPID 626:	Violence as a Public Health Problem
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 744:	Advanced Genetic Epidemiology
EPID 750:	Fundamentals of Public Health Surveillance
EPID 754:	Mathematical Modeling of Infectious Diseases
EPID 755:	Introduction to Infectious Disease Epidemiology
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
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
EPID 814:	Obesity Epidemiology
EPID 818:	Analytical Methods in Nutritional Epidemiology
EPID 826:	Social Epidemiology: Concepts and Measures
EPID 827:	Social Epidemiology: Analysis and Interpretation
EPID 851:	Reproductive and Perinatal Epidemiology
EPID 853:	Advanced Topics in Perinatal & Pediatric Epidemiology