

## Requirements for the Epidemiology Track within the PhD Degree in Biomedical Sciences

*UPDATED: July 2015*

A total of at least 96 credit hours (or at least 64 credit hours if the student has a prior, approved and related masters degree) are required per university regulations. At least 30 credit hours must be graded graduate coursework (excluding 681, 691).

<b>General Core Courses*</b>	<b>Credit Hours</b>
STAT 651 Statistics in research I	3
STAT 652 Statistics in research II	3
VIBS 608 Epidemiologic methods I	4
VIBS 610 Epidemiologic methods II	4
VIBS 650 Graduate education	1
VIBS 681 Seminar	1-4
VIBS 691 Research	Var

### **Additional Quantitative Courses (3 minimum)\***

In addition to the general core courses above, students must take three more graduate level courses in quantitative methods. Examples are provided below.

ESSM 689	Quantitative methods in ecology, evolution, biography	3
PHEB 606	Survival analysis	3
PHEB 609	Categorical data analysis	3
PHEB 614	Analysis of longitudinal multi data	3
PHEB 689	Survey & missing data analysis	3
SOCI 623	Measurement of sociological parameters	3
SOCI 624	Qualitative methodology	3
STAT 607	Sampling	3
STAT 636	Methods in multivariate analysis	3
STAT 653	Statistics in research III	3
STAT 659	Applied categorical data analysis	3
VTMI 689	Risk assessment	3
WFSC 624	Dynamics of populations	4

<b>Elective Courses*</b>	<b>Credit Hours</b>	
ENTO 618	Medical and veterinary entomology	3
ENTO 625	Landscape ecology	3
FSTC 606	Microbiology of foods	3
FSTC 657	HAACP	3
GEOG 651	GIS for resource managers	3
GEOG 652	Advanced topics in geographic information systems	3
HLTH 605	Health research methods	3
HLTH 607	International health	3
PHEB 600	Fundamentals of epidemiology	3
PHEB 602	Biostatistics I	3

PHEB	603	Biostatistics II	3
PHEB	615	Disaster epidemiology	3
PHEB	618	Spatial epidemiology	3
PHEB	619	Infectious disease epidemiology	3
PHEB	624	Social epidemiology	3
PHEB	689	Methods in field epidemiology	3
PHEO	600	Principles of environmental/occupational health	3
PHEO	610	Basic environmental toxicology	3
PHEO	612	International environmental health	3
VIBS	607	Applied epidemiology	4
VIBS	615	Food hygiene	4
VIBS	619	Food toxicology II	3
VIBS	633	Animal diseases in comparative medicine	3
VIBS	670	Basic environmental toxicology	3
VIBS	689	Special topics in epidemiology and public health (various)	1-4
VPAR	601	Parasitology	4
VPAT	601	Comparative pathology	4
VTMI	601	Fundamentals of pathobiology	5
VTMI	619	Molecular methods in microbiology	3
VTMI	643	Pathogenic bacteriology	4
VTMI	645	Host-agent interaction	3
VTMI	647	Virology	4
VTMI	649	Immunology	3
VTMI	689	Risk assessment	

\*Or equivalent courses as determined by the student's advisory committee. Some of the courses listed are not taught every semester and students should consult with their advisory committee to identify appropriate addition/substitution courses as necessary.

### **Technical Writing**

Depending on the assessment of the student's writing skills by his/her advisory committee, completion of a technical writing course may be required.