

## Appendix 2. Curriculum for Ph.D. in Microbiology

<b>Course Title</b>	<b>Course Number</b>	<b>Semester Credit Hours</b>
<b>CORE COURSES (12 SEMESTER HOURS)</b>		
Scientific Communication	BIO 710	3
Microbial Genetics and Genomics	BIO 720	3
Microbial Physiology and Diversity	BIO 730	3
Environmental Microbiology	BIO 740	
OR		
Microbiology of Food Systems	BIO 741	3
OR		
Microbiology of Water Systems	BIO 742	
<b>REQUIRED MAJOR SUPPORT COURSES (13 SEMESTER HOURS)</b>		
Biochemistry	CHE 700	3
Biostatistics	BST 700	3
Laboratory Research Rotation	BIO 700	3
Microbial Risk Assessment and Management	BIO 750	3
Seminar in Microbiology	BIO 875	1
<b>MAJOR ELECTIVE COURSES (12 SEMESTER HOURS)</b>		
Advanced Microbiology	BIO 701	4
Applied Microbiology	BIO 702	4
Virology	BIO 703	4
Molecular Genetics	BIO 704	4
Environmental Chemistry	CHE 705	3
Microbial Ecology	BIO 805	3
Microbial Pathogenesis	BIO 815	3
Microbiology of Food Sanitation	BIO 825	3
Microbial Water Quality	BIO 835	3
Microbial Bioterrorism and Safety	BIO 845	3
Microbial Biotechnology	BIO 855	3
Special Topics in Food and Water Microbiology	BIO 865.01	Repeatable for Up to 3
Special Topics in Environmental Microbiology	BIO865.02	
<b>REQUIRED DOCTORAL RESEARCH AND DISSERTATION</b>		
Doctoral Research	BIO 799	Variable
Doctoral Dissertation	BIO 899	3
<b>M.S. Requirements</b>		
Cell and Molecular Biology	BIO 517	4
Biological Techniques & Instrm.	BIO 521	4
Molecular Genetics	BIO 619	4
(Elective)	BIO _____	4