Curriculum for
Ph.D. in Applied Mathematics for the Life and Social Sciences

Admitted With A Bachelor's	Semester Hours	
Required Core Courses	15	Phase I
Master's in Passing Elective Hours*	15	
Complete Phase I (for students w/o Master's)		
Required Numerical Analysis Course	3	Phase II
Elective Hours*	27	
Present Comprehensive Exams and Defend Dissertation Proposal		
Required Research Hours	12	Dissertation
Required Dissertation Hours	12	
Total Semester Hours Required	84	

*All courses should be in consultation with student's advisor or chair.

All students admitted with a bachelor's degree to the Ph.D. in Applied Mathematics in the Life and Social Sciences program are automatically admitted into Phase I and must complete the following:

I. **Phase I: Required Core Courses** (15 credits)
   a. AML 610 Topics in AMLSS *(3 credits)*
   b. AML 611 Research Design and Proposal Writing*(3 credits)*
   c. AML 612 AMLSS Modeling Seminar*(3 credits)*
   d. AML 613 Probability & Stochastic Modeling for LSS *(3 credits)*
   e. One course in Bio-Statistics *(3 credits)*

II. **Phase I: Elective and Research Courses** (15 credits)
   a. Elective hours in consultation with faculty advisor or chair (students may take "Reading and Conference" or "Research Hours" to fulfill these credits) *(24-27 credits)*
   b. Student must complete 30 credit hours before passing to Phase II
   c. Student needs two completed research papers for portfolio

III. **Complete Master's in Passing** (Masters Degree Granted)
   a. Present master's research at Graduate Symposium (in April or May of second year)
   b. Present portfolio to be reviewed by a subcommittee appointed by the graduate committee

IV. **Phase II: Required Courses** (3 credits)
   a. One course in Numerical Analysis *(3 credits)*

V. **Phase II: Elective Hours** (27 credits)
   a. Elective hours in consultation with student's chair *(27 credits)*
      i. *At least 6 credits must be in the Life Sciences, and*
      ii. *At least 6 credits from the Social Sciences*

VI. **Comprehensive Exams and Dissertation Proposal Defense**

VII. **Dissertation and Research Credits** (24 credit hours)
   a. AML 792 Dissertation Research *(maximum of 12 credits)*
   b. AML 799 Dissertation *(12 credits)*

VIII. **Completion of Program**
   a. Present dissertation orally in an open forum

School of Human Evolution and Social Change
COLLEGE OF LIBERAL ARTS AND SCIENCES, ARIZONA STATE UNIVERSITY
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Curriculum for
Ph.D. in Applied Mathematics for the Life and Social Sciences

Admitted with a Master's	Semester Hours	
Required Core Courses	18	Phase II
Elective Hours*	12	
Present Comprehensive Exams and Defend Dissertation Proposal		
Required Research Hours	12	Dissertation
Required Dissertation Hours	12	
Total Semester Hours Required	54	

*All courses should be in consultation with student's advisor or chair.

All students admitted with a master's degree to the Ph.D. in Applied Mathematics for the Life and Social Sciences program are automatically placed into Phase II and must complete the following:

I. **Phase I: Required Core Courses** (18 credits)
   a. AML 610 Topics in AMLSS *(3 credits)*
   b. AML 611 Research Design and Proposal Writing*(3 credits)*
   c. AML 612 AMLSS Modeling Seminar*(3 credits)*
   d. AML 613Probability & Stochastic Modeling for LSS *(3 credits)*
   e. One course in Bio-Statistics *(3 credits)*
   f. One course in Numerical Analysis *(3 credits)*

II. **Phase II: Elective Hours** (12 credits)
   a. Elective hours in consultation with student's chair *(12 credits)*
      i. *At least 6 credits hour must be in the Life Sciences, and*
      ii. *At least 6 credit hours from the Social Sciences*

III. **Comprehensive Exams and Dissertation Proposal Defense**

IV. **Dissertation and Research Credits** (24 credits)
   a. AML 792 Dissertation Research *(maximum of 12 credits)*
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