

Applied Math and Statistics Minor in Applied Mathematics Curriculum Chart 2011-2012

CALCULUS

MATH 19A or 20A Calculus	MATH 23A Multivariable Calculus
&	
MATH 19B or 20B Calculus	MATH 23B Multivariable Calculus

LINEAR ALGEBRA and DIFFERENTIAL EQUATIONS

AMS 10 Mathematical Methods for Engineers I	OR	MATH 21* Linear Algebra	OR	PHYS 116A* Mathematical Methods in Physics
AMS 20 Mathematical Methods for Engineers II	OR	MATH 24* Differential Equations	OR	PHYS 116B* Mathematical Methods in Physics

PROBABILITY THEORY

AMS 131 Introduction to Probability Theory
OR
CE 107 Mathematical Methods of Systems Analysis: Stochastic

INTRODUCTION TO NUMERICAL METHODS

AMS 147 Computational Methods & Applications	OR	PHYS 115 Computational Physics	OR	EART 119 Introduction to Scientific Computing
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DYNAMICAL SYSTEMS

AMS 114 Introduction to Dynamical Systems
OR
AMS 214 Applied Dynamical Systems

PARTIAL DIFFERENTIAL EQUATIONS

AMS 212A Applied Mathematical Methods I	OR	PHYS 116C Mathematical Methods in Physics	OR	MATH 107 Partial Differential Equations
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APPLIED MATH ELECTIVE

Choose one: AMS 107/217, AMS 115/215, AMS 132, AMS 198, AMS 212B, AMS 213, AMS 216, AMS 231, OR AMS 290B

(Students may also propose other electives which use applied mathematical methods, subject to approval by the department.)

Information on the Applied Mathematics Minor

The applied mathematics minor is available for students who wish to develop (1) proficiency in modeling real-life problems using mathematics and (2) knowledge of standard, practical analytical and numerical methods for the solution of these models. This minor could be combined with a major in any of the physical, biological, mathematical, or engineering sciences as preparation for a graduate degree in that field or in applied mathematics.

*Students who complete Math 21 and 24 or Phys 116A and 116B in lieu of AMS 10 and 20, are strongly recommended to complete the Matlab self-paced tutorial at: <http://matlab-training.soe.ucsc.edu/>

APPLIED MATH AND STATISTICS: APPLIED MATHEMATICS MINOR
DEGREE CURRICULUM

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

Fall _____	Winter _____	Spring _____	Summer _____

STUDENT'S NAME:

STAFF ADVISOR: