

Applied Math and Statistics Minor in Applied Mathematics Curriculum Chart 2012-2013

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

MATH 24*
Differential
Equations

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

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

APPLIED MATH ELECTIVE

Choose one: AMS 107/217, 115/215, 118, 132, 198, 212B, 213, 216, 231, 290B; EE 103, 154; CMPE 115; MATH 103A, 117, 121A; PHYS 105, 139A, 139B, 171

Students may also propose other electives which use applied mathematical methods (e.g. relevant courses from Mathematics, Physics, Chemistry, Earth Sciences, Ocean Sciences, Ecology & Evolutionary Biology, etc.), 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: