BS in Mathematics with specialization in Applied Mathematics (Certificate Math Bio)

Year 1	Year 2	Year 3	Year 4
MATH 241 Calculus I FS English 100 FW Bio 171 DB** H/SL 101 FG	MATH 243 Calculus III MATH 321 Introduction to Advanced Mathematics W H/SL 201 Phys 272L DP DY	Math 302 Intro DEs I* Math 304 Math Modeling I** Bio 265** Chem 171/L DP DY Related XXX	MATH 431 Principles of Analysis I W MATH 471 Probability* Related XXX E Related XXX HAP
MATH 242 Calculus II FG DH Phys 170L DP DY Bio 172 DB** H/ SL 102	MATH 244 Calculus IV MATH 331 Introduction to Real Analysis MATH 307/311 Introduction to Linear Algebra W H/SL 202 DS	Math 305 Math Modeling** MATH 407 Numerical Analysis* Chem 272/L DP DY Bio 275** Related XXX W	MATH 442 Vector Analysis* MATH 472 Statistical Inf.* MATH 480 Senior Seminar O Related XXX W DA
		Summer REU	

Foundations and Diversification

These include the calculus sequence and UHM Gen. Ed. Core Requirements.

In these courses, you should acquire the tools to succeed in college and be introduced to global and Hawaiian perspectives.

Hawaiian/Second Language and Focus

These graduation requirements include two years of language and an Ethics, Writing Intensive and Oral component.

Bridge

These courses are your bridge to upper level mathematics. In 307 or 311, 321, & 331 you develop the tools to do advanced mathematics. The other 300 level topics courses are good to take in your 2nd & 3rd year.

311 Intro. Linear Algebra
307 Linear Alg. & DE
321 Intro. Adv. Math
331 Intro. Real Analysis

301 Intro. Discrete Math
302 Intro. DEs*
304/5 Math Modeling
351/352 Geometry
372 Probability & Stats* (373 Spring 2017)

Core

These are the core courses of the major. The 412/413 sequence and 431 are minimum requirement for most graduate math programs. Even if you are not continuing to grad school, math majors should take the bulk of their courses from this section.

412/3 Intro. Abstract Algebra
431/2 Principles of Analysis
402 PDEs*
407 Numerical Analysis*
411 Linear Algebra*
420 Intro. Number Theory
421 Topology
442 Vector Analysis*
443 Differential Geometry
444 Complex Analysis*
454 Set Theory
455 Logic
471 Probability*
472 Statistical Inference*

For a BS, up to 15 credits of upper division courses can come from related disciplines (Related XXX).
* Denotes suggested mathematics electives for a student interested in applied mathematics.
** Denotes required courses for Certificate in Math Biology.