## Mathematics (BA) (BS)

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The mathematics curriculum at Mary Baldwin emphasizes the development of a student's ability to think and engage in the process of problem solving. Techniques associated with logic, analysis, data manipulation, computing, pedagogy, and the understanding of mathematical assumptions and structures are taught. Students will be exposed to both pure and applied mathematics, gaining analytical and practical skills necessary for succeeding in industry, as an educator, or in graduate school.

Department: Mathematics \& Applied Mathematics
Type: Major

## Requirements for the Bachelor of Arts in Mathematics

The listed courses below and additional courses in Math numbered $2 x x / 3 x x$ to total 35 s.h. Note that a maximum of 3 s.h. of Math 380: Teaching Assistantship may count toward the mathematics major.

| Item \# | Title | Credits |
| :--- | :--- | :--- |
| MATH 211 | INTRO CALC/ANALYTIC GEOMETRY I (Q) | 4 |
| MATH 212 | INTRO CALC/ANALYTIC GEOMETRY II (Q) | 4 |
| MATH 231 | DISCRETE MATHEMATICAL STRUCTURES(Q) | 3 |
| MATH 303 | MULTIVARIABLE CALCULUS | 3 |
| MATH 306 | ORDINARY DIFFERENTIAL EQUATIONS (Q) | 3 |
| MATH 322 | LINEAR ALGEBRA (Q) | 3 |
|  | MATH 396 or MATH 398 | 3 |
| MATH 401 | SENIOR SEMINAR (M) | 3 |

## Requirements for the Bachelor of Arts in Mathematics with Math Education Emphasis 41 semester hours

The committee formed for evaluating the student's senior project will include a faculty member from the education department. The student's senior project must be in the area of mathematics education.

| Item \# | Title | Credits |
| :--- | :--- | :--- |
| ED 238 | METHODS TEACHING MATH-ELEM LEV (Q) | 3 |
| MATH 211 | INTRO CALC/ANALYTIC GEOMETRY I (Q) | 4 |
| MATH 212 | INTRO CALC/ANALYTIC GEOMETRY II (Q) | 4 |
| MATH 221 | GEOMETRIES \& HISTORY OF MATH (Q) | 3 |
| MATH 231 | DISCRETE MATHEMATICAL STRUCTURES(Q) | 3 |
| MATH 233 | STATISTICAL METHODS \& THEORY I (Q) | 3 |
| MATH 303 | MULTIVARIABLE CALCULUS | 3 |
| MATH 322 | LINEAR ALGEBRA (Q) | 3 |
| MATH 380 | TEACHING ASSISTANT FOR | 3 |
| MATH 398 | ABSTRACT ALGEBRA I (Q) | 3 |
| MATH 401 | SENIOR SEMINAR (M) | 3 |
| ED 115 | FOUNDATIONS OF EDUCATION $(T)$ | 3 |

## Recommended Programs

## For teachers of mathematics:

Students at Mary Baldwin University may obtain a BA in Mathematics with a Math Education emphasis. Students in this program are encouraged to apply to be math tutors and are required to sign up for Math 380, a teaching assistantship in mathematics.

## Requirements for the Bachelor of Science in Mathematics

All of the requirements listed for the BA, plus the following:
MATH 2xx/3xx not counted in the BA. One other 200 or 300-level laboratory science course and the listed courses below.

| Item \# | Title | Credits |
| :--- | :--- | :--- |
| PHYS 201 | GENERAL PHYSICS I (NQ) | 4 |
| PHYS 202 | GENERAL PHYSICS II | 4 |

