## MATHEMATICS (BA/BS)

Chairperson: Yousef Daneshbod
Regular Faculty: Gail Tang, Frank Ives, Xiaoyan Liu, Rick Simon Adjunct Faculty: Amit Mishal
Emeritus Faculty: Michael Frantz
The Mathematics program offers students preparation for graduate study, careers in teaching, scientific computing, and technology-related industry. While offering a basic grounding in the classical areas of mathematics, the curriculum also emphasizes applied mathematics and its constantly evolving role in analyzing and solving problems in fields ranging from economics to aerodynamics to the environment.

## Degree Requirements

B.A. 58 semester hours
B.S. 62 semester hours

## Core Requirements for B.A. and B.S.

24 semester hours

| Code | Title | Semester <br> Hours |
| :--- | :--- | ---: |
| MATH 201 | Calculus I | 4 |
| MATH 202 | Calculus II | 4 |
| MATH 305 | Transition to Advanced Mathematics | 4 |
| MATH 311 | Calculus III | 4 |
| MATH 320 | Linear Algebra | 4 |
| MATH 499A | Math Senior Seminar A | 2 |
| MATH 499B | Math Senior Seminar B | 2 |
| Total Semester Hours | $\mathbf{2 4}$ |  |

## Additional Core Requirements for B.A.

8 semester hours

| Code | Title | Semester <br> Hours |
| :---: | :--- | ---: |
| MATH 319 | Vector Calculus | 4 |
| or MATH 328 | Abstract Algebra | 4 |
| MATH 325 | Number Theory | 4 |
| or MATH 351 | Probability |  |

Total Semester Hours

## Additional Core Requirements for B.S.

12 semester hours

| Code | Title | Semester <br> Hours |
| :--- | :--- | ---: |
| MATH 315 | Differential Equations | 4 |
| MATH 328 | Abstract Algebra | 4 |
| MATH 410 | Real Analysis | 4 |
| Total Semester Hours | $\mathbf{1 2}$ |  |

Prerequisite Requirements for B.A. and B.S.

[^0]| Code | Title | Semester <br> Hours |
| :--- | :--- | ---: |
| CMPS 367 | Object Oriented Language C++ | 4 |
| PHYS 203 | Physics I: Mechanics | 5 |
| PHYS 204 | Physics II: Electricity \& Magnetism | 5 |
| Total Semester Hours | $\mathbf{1 4}$ |  |

## Electives for B.A. and B.S.

A minimum of 12 semester hours in upper division mathematics courses.

Note: All Mathematics courses being transferred in to fulfill requirements for the Mathematics major must be approved by the Mathematics Program Chair. All courses from community colleges are, by definition, lower-division and are rarely approved as equivalent to upper division courses taught at La Verne.


[^0]:    14 semester hours

