## B.S. MATHEMATICS

## COLLEGE of ARTS \& SCIENCES Language Requirement

All students who major in the College of Arts \& Sciences are required to
demonstrate competence in a second language. For complete details:
https://www.gonzaga.edu/college-of-arts-sciences/about/information-for--
students/language-requirement-information

## UNIVERSITY CORE REQUIREMENTS:

## $\rightarrow$ FUNDAMENTAL CORE COURSES

Year 1: Understanding \& Creating

| Writing |
| :--- |
| ENGL 101 Writing |$\quad$ (fulfills 3 credits Writing Enriched)* Credits Sem/Yr

NOTE: some courses have pre-requisites, check the catalog carefully!

| BROADENING COURSES - see approved list** |  |
| :--- | ---: |
| Social \& Behavioral Science | Credits Sem/yr |
| Literature | $\mathbf{3}$ |
| History | $\mathbf{3}$ |
| Fine Arts \& Design | $\mathbf{3}$ |


| *WEQUIRED COURSE DESIGNATIONS - see approved list** |  |
| :--- | ---: |
| *Writing Enriched | Credits Sem/Yr |
|  | $\mathbf{9}$ total |
| Social Justice | $\mathbf{3}$ total $\square$ |
| *Global Studies | $\mathbf{6}$ total $\square$ |

**for list of approved RELI, Broadening \& Designated courses, see : https://my.gonzaga.edu/academics/undergraduate-programs/general-degree-requirements-procedures/university-core

## B.S. MATHEMATICS:

40 CREDITS

## LOWER DIVISION

|  | 12 Credits |  |  |
| :--- | :---: | ---: | ---: |
| Course | Course Title | Credits Grade |  |
| MATH | 157 Calculus \& Analytic Geometry I | 4 |  |
| MATH | 258 Calculus \& Analytic Geometry II | 4 |  |
| MATH | 259 Calculus \& Analytic Geometry III | 4 |  |

## UPPER DIVISION

|  | 13 Credits |  |  |  |
| :--- | :--- | :--- | :--- | :---: |
| Course | Course Title |  | Credits Grade |  |
| MATH | 301 Fundamentals of Mathematics | 3 |  |  |
| MATH | 339 Linear Algebra | 3 |  |  |
| MATH | 413 Real Analysis I | 3 |  |  |
| MATH | 437 Abstract Algebra I | 3 |  |  |
| MATH | 499 Comprehensive-Math* | 1 |  |  |

*Majors take fall semester of their final year

| Select one of the following five (5) courses: | 3 Credits <br> Credits Grade |  |
| :--- | :--- | :---: |
| Course Course Title |  |  |
| MATH 414 Real Analysis II |  |  |
| MATH 417 Complex Variables |  |  |
| MATH 438 Abstract Algebra II |  |  |
| MATH 457 Number Theory \& Cryptography |  |  |
| MATH 459 Topology |  |  |

Select two 300-400 level MATH electives: 6 Credits
(these may also come from the list of 5 above)

## redits Grade

 ,| MATH | 3 |
| :--- | :--- |

## MATH

Cannot double count with a course used above

Select two 400-level MATH electives: 6 Credits

## MATH

MATH Credits Grade

MATH 260 may be used as one 300-400 level elective.

MATH 335, 432, and 496 cannot be used for MATH electives.
A maximum of three (3) credits from the following courses may be counted toward Mathematics electives:
MATH 365 Math Seminar (may be taken for credit only once)
MATH 390 Directed Reading
MATH 490 Directed Reading
MATH 497 Mathematics Internship

