## Degree Guide for the College of Arts and Sciences: 2017-2018 B.S. MATHEMATICS

| COLLEGE of ARTS & SCIENCES<br>Language Requirement   |           |   | B.S. I         | MATHEMATICS:                                | 40 CR       | EDITS      |  |
|--|-----------|---|----------------|---|-------------|------------|--|
| All students who major in the College of Arts & Sciences are required to demonstrate competence in a second language. For complete details see:<br>http://www.gonzaga.edu/Academics/Colleges-and-Schools/College-of- |           |   | LOWER DIVISION |   |             | 12 Credits |  |
| Arts- and-Sciences/Majors-Programs/language-requirement-   | Condition | C   | Course         | Course Title                                | Credits     | Grade      |  |
|  | Credits   | Sem/Yr  | матн           | 157 Calculus & Analytic Geometry I          | 4           |            |  |
|  |           |   | МАТН           | 258 Calculus & Analytic Geometry II         | -<br>Л      |            |  |
|  |           | harmonia  | МАТН           | 259 Calculus & Analytic Geometry III        | 1           |            |  |
| UNIVERSITY CORE REQUIREMEN   | NTS:      |   |                |   | 4           |            |  |
| Year 1: Understanding & Creating   |           |   |                | DIVISION                                    | 28 (        | `redits    |  |
| Writing  | Credits   | Sem/Yr  |                |   | 20 0        |            |  |
| ENGL 101 Writing (fulfills 3 credits Writing Enriched)*  | 3         |   |                |   |             | <b>•</b> • |  |
| Reasoning  |           | Annanitation  | Course         | Course litle                                | Credits     | Grade      |  |
| PHIL 101 Reasoning   | 3         |   | MATH           | 301 Fundamentals of Mathematics             | 3           |            |  |
| First Year Seminar   |           | prostant strategy and   | MATH           | 339 Linear Algebra                          | 3           |            |  |
| 193  | 3         |   | MATH           | 499 Senior Comprehensive                    | 1           |            |  |
| Communication & Speech   |           |   |                |   |             |            |  |
| COMM 100 Communication & Speech  | 3         |   | Any fo         | our 400-Level Mathematics courses:          | 12 0        | credits    |  |
| Math   | 2         | []  | Course         | Course Title                                | Credits     | Grade      |  |
| MATH (must be above Math 100)  | 3         |   | матн           |   | 3           |            |  |
|  | 2         |   | ΜΔΤΗ           |   | 3           |            |  |
| BIOL or CHEIVI or PHYS 104/104L (taken year 1 or 2)  | 3         |   |                |   | 2           |            |  |
| Christianity <sup>9</sup> Catholia Traditiona  | Cuadita   | Com   |                |   | 2           |            |  |
|  |           | sem/tr  |                |   | 3           |            |  |
| RELI (see approved list)**   | 3         |   |                |   |             |            |  |
| PHIL 201 Dilosophy of Human Nature   | 2         | r in the second | Mathe          | ematics Electives                           | 90          | redits     |  |
| Vogr 2: Caring & Doing   | 3         |   | Course         | Course Title                                | Credits     | Grade      |  |
| World/Comparative Polician   | Crodits   | Som/Vr  | MATH           |   | 3           |            |  |
| RELL (see approved list)** (fulfills 2cr Global Studies)   | * 2       |   | MATH           |   | 3           |            |  |
| Fthics   | 3         |   | MATH           |   | 3           |            |  |
| PHIL 301 Ethics or RELL330 Principals-Christian Morali   | tv 3      | <b></b>   |                | Minimum of 9 credits from the follow        | ving*:      |            |  |
| Year 4: Imagining the Possible   | cy J      |   |                | *One of these courses may be replaced by MA | у<br>ТН 260 |            |  |
| Core Integration Seminar   | Credits   | Sem/Yr  | матн           | 321 Statistics for Experimentalists         |             |            |  |
| 492  | 3         |   |                | 228 Operations Research                     |             |            |  |
|  |           |   |                | 328 Operations Research                     |             |            |  |
| NOTE: some courses have pre-requisites, check the catalog  | ue carej  | rully!  |                | 341 Modern Geometry                         |             |            |  |
| BROADENING COURSES - see approved list**   |           |   | MATH           | 350 Elementary Numerical Analysis           |             |            |  |
| Social & Behavioral Science  | Credits   | s Sem/Yr  | MATH           | 351 Combinatorics & Graph Theory            |             |            |  |
|  | 3         |   | MATH           | 360-363 Selected Topics                     |             |            |  |
| Literature   |           | presentation  | MATH           | 413 Real Analysis I                         |             |            |  |
|  | 3         |   | MATH           | 414 Real Analysis II                        |             |            |  |
| History  | 2         | ······  | MATH           | 417 Complex Variables                       |             |            |  |
| Fine Arts & Design   | 3         |   | MATH           | 421 Probability Theory                      |             |            |  |
| The Arts & Design  | 3         |   | матн           | 422 Mathematical Statistics                 |             |            |  |
|  |           |   | МАТН           | 437 Abstract Algebra I                      |             |            |  |
| REQUIRED COURSE DESIGNATIONS - see approve   | d list**  | *   |                | 437 Abstract Algebra II                     |             |            |  |
| *Writing Enriched  | Credits   | s Sem/Yr  |                | 450 ADStract Algebra II                     |             |            |  |
| Casial Justica   | 9 total   |   |                |   |             |            |  |
| Social Justice   | 3 total   |   | MATH           | 454 Partial Differential Equations          |             |            |  |
| *Global Studies  | Jiordi    |   | MATH           | 457 Number Theory & Cryptography            |             |            |  |
|  | 6 total   |   | MATH           | 459 Topology                                |             |            |  |
| **for list of approved RELI, Broadening & Designated   | courses   | s, see :  | MATH           | 490 Directed Reading                        |             |            |  |
| http://www.gonzaga.edu/Academics/Undergraduate/Gene  | eral-Dea  | gree-   | MATH           | 497 Mathematics Internship                  |             |            |  |
| Requirements-and-Procedures/University-Core/Default.asp  |           |   |                |   |             |            |  |
|  |           |   |                |   |             |            |  |