| FRESHMAN  | COURSES  | CREDITS  | TOTAL |
|-----------|--|----------|-------|
|           | AIC1140, APEX 1 (or AIC1100 Introduction to ACE (3 cr))      | 1        | 14    |
|           | ENG1201, English Composition or ENG 1601 (Gen Ed category 4) | 3        |       |
| FALL      | BIO1400, Biology I with lab BIO1401 (Gen Ed category 1)      | 4        |       |
|           | Gen Ed course (category 2 or 4)                              | 3        |       |
|           | Gen Ed course (category 2 or 4)                              | 3        |       |
|           | ENG1202 Analytical Writing or ENG1602 (Gen Ed category 3)    | 3        | 17    |
|           | BIO1500, Biology II with lab BIO1501 (Gen Ed category 1)     | 4        |       |
| SPRING    | MAT1840, College Algebra and Trig                            | 4        |       |
|           | Gen Ed course (category 2 or 4)                              | 3        |       |
|           | Elective   | 3        |       |
| SOPHOMORE |  |          |       |
|           | BIO2400, Comparative Vertebrate Anatomy, with lab (BIO2401)  | 4        | 13    |
|           | CHE1600, General Chemistry I (includes CHE1602, Review)      | 4        |       |
| FALL      | CHE1601, General Chemistry Lab I                             | 1        |       |
|           | MAT2400, Calculus I  | 4        |       |
|           | AIC2142, APEX 2  | 2        | 17    |
|           | BIO2430, Microbiology, with lab (BIO2431)                    | 4        |       |
|           | CHE1700, General Chemistry II (includes CHE1702, Review)     | 4        |       |
| SPRING    | CHE1701, General Chemistry Lab II                            | 1        |       |
|           | MAT2004, Biostatistics (Gen Ed category 1)                   | 3        |       |
|           | Gen Ed course (category 2, 3 or 4)                           | 3        |       |
| JUNIOR    |  |          |       |
|           | BIO3450, Genetics, with lab (BIO3451)                        | 4        | 14    |
|           | CHE2400, Organic Chemistry I                                 | 3        |       |
| FALL      | CHE2401, Organic Chemistry Lab I                             | 1        |       |
|           | Gen Ed course (category 2, 3 or 4)                           | 3        |       |
|           | Gen Ed course (category 2, 3 or 4)                           | 3        |       |
|           | AIC3140, APEX 3  | 1        | 16    |
|           | BIO3440, Ecology, with lab                                   | 4        |       |
| 0001110   | BIO3XXX, Biology elective, with lab                          | 4        |       |
| SPRING    | CHE2500, Organic Chemistry II                                | 3        |       |
|           | CHE2501, Organic Chemistry Lab II                            | 1        |       |
|           | Gen Ed course (Gen Ed category 2, 3 or 4)                    | 3        |       |
| SENIOR    |  |          |       |
| FALL      | AIC4140, APEX 4  | 1        | 16    |
|           | BIO4803, Senior Seminar in Biology                           | 3        |       |
|           | BIO3XXX, Biology elective, with lab                          | 4        |       |
|           | PHY1600, General Physics I (with PHY1602, Review)            | 4        |       |
|           | PHY1601, General Physics I lab                               | 1        |       |
|           | Elective   | 3        |       |
| SPRING    | BIO4350, Evolution   | 3        | 14    |
|           | BIO3XXX, Biology elective, with lab                          | 4        |       |
|           | PHY1800, General Physics II (with PHY1802, Review)           | 3        |       |
|           | PHY1801, General Physics II lab                              | 1        |       |
|           | Elective   | 3        |       |
|           |  | TOTAL    | 45.   |
|           |  | CREDITS: | 121   |

## Notes:

 $<sup>^{*}\</sup>mbox{A}$  student will incur additional tuition charges in any semester in excess of 17 credits.

 $<sup>\</sup>ensuremath{^{**}}\mbox{A}$  student must apply to the Dean for permission to take more than 18 credits in any given semester.

**MAJOR: Biology American International College** Catalog Year: 2020-2021 School of Business, Arts and Sciences List of Requirements (all courses are 3 credits unless otherwise noted) **Major Requirements:** All biology majors must complete the following required biology core of courses that include: BIO1400 Biology I, with lab, BIO1401 (4 cr) Biology II, with lab, BIO1501 (4 cr) BIO1500 BIO2400 Comparative Vertebrate Anatomy, with lab, BIO2401 (4 cr) BIO3440 Ecology, with lab, BIO3441 (4 cr) BIO3450 Genetics, with lab, BIO3451 (4 cr) BIO4350 Evolution BIO4803 Senior Seminar in Biology And, one of the following courses: Microbiology, with lab, BIO2431 (4 cr) BIO2430 BIO3400 Cell Biology, with lab, BIO3401 (4 cr) **CREDITS** All biology majors must complete a minimum of 12 elective credits in biology courses at or above the 3000 level in addition to the required biology core. No more than one semester of BIO4698, 4798, 4833, or 4834 may be counted towards satisfying the requirements of the biology major. \_BIO\_\_\_\_ BIO BIO BIO BIO **CREDITS** All biology majors must also complete the required core in allied fields: CHE1600 General Chemistry I, with review CHE1602 and lab CHE1601 (5 cr) CHE1700 General Chemistry II, with review CHE1702 and lab CHE1701 (5 cr) CHE2400 Organic Chemistry I, with lab CHE2401 (4 cr) Organic Chemistry II, with lab CHE2501 (4 cr) CHE2500 General Physics I, with review PHY1602 and lab PHY1601 (5 cr) PHY1600 General Physics II, with review PHY1802 and lab PHY1801 (5 cr) PHY1800 MAT2004 Biostatistics (Gen Ed category 1) **CREDITS** Additionally, all biology majors must complete two of the following courses: MAT1840 College Algebra and Trigonometry (4 cr) MAT2400 Calculus I (4 cr) Calculus II, with lab MAT2501 (4 cr) MAT2500 **CREDITS** 

By appropriate selection of electives, students may focus their studies on any of the following areas:

- Bio-Education (see education department information for professional requirements for teacher education)
- Biomedical (for students interested in medical professions)
- Cell and Molecular Biology
- Ecology/Environmental Science
- General Biology
- Zoology

| General Education Requirements Catalog Year: 2020-2021 |
|--|
| 7 or 10 credits*                                       |

| Content  | Category #1: Expl  | loring Scientific Wor        | rld 7 or 10 credits*  |  |  |  |  |
|--|--|------------------------------|---|--|--|--|--|
|  | Requirements: 1 Math Course (3 cr) & 1 Science course w/Lab (4 cr). A 2 <sup>nd</sup> science course*, with or |                              |   |  |  |  |  |
|  | without lab, may be completed in lieu of one INT course.   |                              |   |  |  |  |  |
|  | Choose 1   | Math                         | MAT1310, MAT1430, MAT2004, MAT2030, PSY/CRJ2302                   |  |  |  |  |
|  | Choose 1   | SCIENCE with                 | BIO1020/1021, BIO1100/1101, BIO1110/1111, BIO1130/1131,           |  |  |  |  |
|  |  | LAB                          | BIO1200/1201, BIO1300/1301, BIO1400/1401, BIO1500/1501,           |  |  |  |  |
|  |  |                              | CHE1100/1101, CHE1110/1111, CHE1200/1201,                         |  |  |  |  |
|  |  |                              | CHE1600/1601/1602, PHY1010/1011, PHY1020/1021,                    |  |  |  |  |
|  |  |                              | PHY1030/1031, PHY1050/1051, PHY1600/1601/1602                     |  |  |  |  |
|  | *OPTION:   | SCIENCE with/                | BIO1020/1021, BIO1100/1101, BIO1110/1111, BIO1130/1131,           |  |  |  |  |
|  | Choose 1   | without LAB                  | BIO1200/1201, BIO1300/1301, BIO1400/1401, BIO1500/1501,           |  |  |  |  |
|  |  | (Choose this                 | CHE1100/1101, CHE1110/1111, CHE1200/1201,                         |  |  |  |  |
|  |  | option OR a 3 <sup>rd</sup>  | CHE1600/1601/1602, PHY1010/1011, PHY1020/1021,                    |  |  |  |  |
|  |  | INT, Category 3)             | PHY1030/1031, PHY1050/1051, PHY1600/1601/1602                     |  |  |  |  |
| Content Category #2: Understanding Self and Others 9 credits     |  |                              |   |  |  |  |  |
|  |  |                              | ry: Self Context (3 cr), US Context (3 cr), Global Context (3 cr) |  |  |  |  |
|  | Choose 1   | Self Context                 | PSY1401, PSY1501, SOC1010, SOC1100, SOC1400                       |  |  |  |  |
|  | Choose 1   | US Context                   | AMS1100, ECO1000, ECO1401, ECO1402, HST1510,                      |  |  |  |  |
|  |  |                              | HST1520, HST1600, PCH1030, POL1000, POL1400                       |  |  |  |  |
|  | Choose 1   | Global Context               | ECO1010, HST1400, HST1410, HST1420, HST1430,                      |  |  |  |  |
|  |  |                              | HST1500, IBS1420, PCH2030, PHI2010, PHI2030, POL1500              |  |  |  |  |
| Content  |  | loring Interdisciplina       |   |  |  |  |  |
|  |  | · · · · · ·                  | AND 2 (or 3*) Interdisciplinary (INT) courses (6 or 9 cr)         |  |  |  |  |
|  | Choose 1   | Analytical                   | ENG1202 or ENG1602  |  |  |  |  |
|  |  | Writing                      |   |  |  |  |  |
|  | Choose 2   | Interdisciplinary            | INT2100, INT2101, INT2102, INT2103, INT2104, INT2105,             |  |  |  |  |
|  |  | courses                      | INT2106, INT2107, INT2108, INT2109                                |  |  |  |  |
|  | *OPTION:   | Interdisciplinary:           | INT2100, INT2101, INT2102, INT2103, INT2104, INT2105,             |  |  |  |  |
|  | Choose 1   | a 3 <sup>rd</sup> INT course | INT2106, INT2107, INT2108, INT2109                                |  |  |  |  |
|  |  | (OR a science                |   |  |  |  |  |
|  |  | course, cat 1)               |   |  |  |  |  |
| Content Category #4: Exploring the Arts and Humanities 9 credits |  |                              |   |  |  |  |  |
|  |  |                              | ry: Arts (3 cr) and Humanities (3 cr)                             |  |  |  |  |
|  | Choose 1   | English                      | ENG1201 or ENG1601  |  |  |  |  |
|  |  | Composition                  |   |  |  |  |  |
|  | Choose 1   | Arts                         | ART1000, COM2460, COM3290, MUSXXX (any 3 cr course),              |  |  |  |  |
|  |  |                              | THR1400, VDA2640  |  |  |  |  |
|  | Choose 1   | Humanities                   | ENG2XXX (any 3 cr literature course), PHI1000, PHI1200,           |  |  |  |  |
|  |  |                              | PHI1400, Foreign Language course (intro or intermediate)          |  |  |  |  |
| Content  |  | eloping Professional         |   |  |  |  |  |
|  |  |                              | AIC1100 (3 cr) & AIC  |  |  |  |  |
|  | Choose 1   | APEX or ACE                  | AIC1100 (3 cr) or AIC1140 (1 cr)                                  |  |  |  |  |
|  | Choose 1   | APEX                         | AIC2142 (2 cr)  |  |  |  |  |
|  | Choose 1   | APEX                         | AIC3140 (1 cr)  |  |  |  |  |
|  | Choose 1   | APEX                         | AIC4140 (1 cr)  |  |  |  |  |
|  | Choose 1 (AIC  | APEX for special             | AIC Online program only: AIC4141 (3 cr)                           |  |  |  |  |
|  | Online or  | programs                     | AIC RN to BSN program only: NUR4600 (3 cr)                        |  |  |  |  |
|  | RNtoBSN  |                              |   |  |  |  |  |
| 1  | programs only)   | 1                            | i e   |  |  |  |  |