

A.S. Biology

ADVANCE Program Milestones

ADVANCE Milestone Requirements: All ADVANCE students must adhere to the following requirements. For Milestones #1-#3, failure to meet these milestones will prevent a student from matriculating to Mason and/or result in termination from ADVANCE. For Milestones #4-#7, failure to meet these milestones may delay matriculation to Mason.

1. Students must graduate with the NOVA degree aligned with their ADVANCE academic pathway within 4 years of being admitted into ADVANCE. Students are highly encouraged to be continuously enrolled at NOVA/Mason to support progress towards degree completion.
2. Students must maintain a minimum 2.5 cumulative GPA at NOVA and must have a minimum 2.5 GPA upon matriculation to Mason.
3. Students who wish to enroll at Mason for the fall semester must apply for NOVA spring graduation by March 1 or summer graduation by June 1. Students who wish to enroll at Mason for the spring semester must apply for NOVA fall graduation by October 1.
4. Students must begin developmental coursework no later than the first semester in ADVANCE at NOVA.
5. Students must take first college-level MTH course and ENG 111 in the semester immediately following the completion of any MDE or EDE courses (excluding summer).
6. In the first 30 credits, students must complete ENG 111 and ENG 112 with a C or better.
7. Students must complete a college level math course with a C or better no later than one semester before NOVA graduation. Refer to your pathway to select the appropriate MTH course(s).

| NOVA DEGREE REQUIREMENT | | Credits | Courses | MASON TRANSFER EQUIVALENT | MASON CORE/DEGREE EQUIVALENT |
|-------------------------|---|---------|---|--|------------------------------------|
| 1 | SDV Course | 1 | SDV 100 College Success Skills OR SDV 101 Orientation to XXX | UNIV 100 | General Elective |
| 2 | ENG 111 | 3 | ENG 111 College Composition I ¹ | ENGH XXX | General Elective |
| 3 | MTH 167 | 5 | MTH 167 Pre-Calculus with Trigonometry ² | MATH 105 | General Elective |
| 4 | CHM 111 | 4 | CHM 111 General Chemistry I | CHEM 211-213 | Major & Nat Science |
| 5 | BIO 101 | 4 | BIO 101 General Biology I | BIOL 103/105 | Major & Nat Science |
| 6 | ENG 112 | 3 | ENG 112 College Composition II ¹ | ENGH 101 | Written Comm |
| 7 | MTH 263 | 4 | MTH 263 Calculus I | MATH 113 | Major & Quantitative |
| 8 | CHM 112 | 4 | CHM 112 General Chemistry II | CHEM 212-214 | Major |
| 9 | HIS Elective | 3 | HIS 101 Western Civilizations Pre-1600 CE OR HIS 102 Western Civilizations Post-1600 CE OR HIS 112 World Civilizations Post-1500 CE (<i>recommended</i>) | HIST 101T HIST 102T HIST 125 | Global History |
| 10 | Humanities/Fine Arts #1 | 3-4 | ART 100 Art Appreciation OR ART 101 History of Art: Prehistoric to Gothic OR ART 102 History of Art: Renaissance to Modern OR CST 130 Introduction to Theatre OR CST 151 Film Appreciation I OR MUS 121 Music in Society OR Foreign Language 201 (<i>if student places into language at 201/202 level</i>) ³ | ARTH 101 ARTH 200 ARTH 201 THR 101 ENGH L372 MUSI 101 GMU Equivalent | Arts or COS BA Foreign Language |
| 11 | BIO 102 (NOVA Catalog: BIO 102 or BIO 207) | 4 | BIO 102 General Biology II | BIOL 102 | Major |
| 12 | CST Course | 3 | CST 100 Principles of Public Speaking OR CST 110 Introduction to Human Communication | COMM 100 COMM 101 | Oral Comm |

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|----|--|-----|---|---|--|
| 13 | Science Course (NOVA Catalog: MTH 264 or MTH 245 or Physical or Life Science Elective w/ Lab) | 4 | PHY 201 General College Physics I OR PHY 202 General College Physics II OR GOL 105 Physical Geology OR GOL 106 Historical Geology | PHYS 243/244 PHYS 245/246 GEOL 101/103 GEOL 102/104 | Major |
| 14 | Social/Behavioral Sciences #1 | 3 | ECO 201 Principles of Macroeconomics OR ECO 202 Principles of Microeconomics OR GEO 210 People and the Land: An Introduction to Cultural Geography OR HIS 121 United States History to 1877 OR HIS 122 United States History Since 1865 OR PLS 135 U.S. Government and Politics OR PSY 200 Principles of Psychology OR PSY 230 Developmental Psychology OR SOC 200 Introduction to Sociology OR SOC 211 Cultural Anthropology | ECON 104 ECON 103 GGS 103 HIST 121 HIST 122 GOVT 103 PSYC 100 PSYC 211 SOCI 101 ANTH 114 | Soc/Behav |
| 15 | BIO 206 | 4 | BIO 206 Cell Biology | BIOL 213 | Major |
| 16 | Science Course (NOVA Catalog: MTH 264, MTH 245, or Lab Science) | 4 | BIO 256 General Genetics | BIOL L311 | Major |
| 17 | Humanities/Fine Arts #2 | 3-4 | ENG 225 Reading Literature: Culture and Ideas OR ENG 245 British Literature OR ENG 246 American Literature OR ENG 255 World Literature OR ENG 258 African American Literature OR ENG 275 Women in Literature OR Any 200-Level ENG Literature course ⁴ OR Foreign Language 202 (if student places into language at 201/202 level) ³ | ENGH 202 or FRLN L330 (ENG 255 only) GMU Equivalent | Literature or COS BA Foreign Language |
| 18 | Physical or Life Science Elective w/ Lab | 4 | PHY 201 General College Physics I OR PHY 202 General College Physics II OR GOL 105 Physical Geology OR GOL 106 Historical Geology | PHYS 243/244 PHYS 245/246 GEOL 101/103 GEOL 102/104 | Major |

A.S. BIOLOGY DEGREE TOTAL 63-65

For academic policies and procedures, please see NOVA catalog - <http://www.nvcc.edu/catalog/index.html>

B.A. Biology

Students may select a concentration in Biological Illustration. See your Mason Biology advisor for more information.

| | MASON DEGREE REQUIREMENT | Credits | Course | MASON CORE/DEGREE EQUIVALENT |
|----|---|---------|--|--|
| 19 | Biology Core Courses | 4 | BIOL 214 Biostatistics for Biology Majors | Major |
| 20 | General Elective | 4 | General Electives (Upper-level See: Advisor) | Major |
| 21 | College BA Requirement | 3 | Select an additional Upper Level Mason Core Arts, Literature, Global Contexts, or Social and Behavioral Sciences ⁵ (See: Advisor) | COS BA Requirement |
| 22 | College Requirement: Foreign Language | 0-6 | Approved foreign language course ^{3,5} (required at Mason if foreign language requirement is not completed at NOVA) | COS BA Foreign Lang. |
| 23 | College Requirement: Foreign Language or General Elective | 3 | Approved foreign language course ^{3,5} OR Upper Level General Elective (if foreign language was taken at NOVA) | COS BA Foreign Lang. or General Elective |
| 24 | Gen Ed: Written Communication (UL) | 3 | ENGH 302 Advanced Composition | Written Comm |
| 25 | Biology Electives | 4 | Any upper-level Biology Elective with lab ⁵ | Major |
| 26 | Biology Core Courses | 5 | BIOL 308 Foundations of Ecology & Evolution | Writing Intensive |
| 27 | Gen Ed: Apex | 3 | Approved Apex Course ⁶ | Apex |

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|----|--|-----|--|--|
| 28 | College Requirement: Foreign Language or General Elective | 3 | Approved foreign language course ^{3,5} OR Upper Level General Elective (<i>if foreign language was taken at NOVA</i>) | COS BA Foreign Lang. or General Elective |
| 29 | Biology Electives | 4 | Any upper-level Biology Elective ⁵ | Major |
| 30 | College BA Requirement | 3 | Select an additional Upper Level Mason Core Arts, Literature, Global Contexts, or Social and Behavioral Sciences ⁴ (<i>Course must be in a different Mason Core category than selected in line 22; See: Advisor</i>) | COS BA Requirement |
| 31 | General Elective | 3 | General Electives (Upper-level See: Advisor) | General Electives |
| 32 | General Elective | 3 | General Electives (Upper-level See: Advisor) | General Electives |
| 33 | General Elective | 3 | General Electives (Upper-level See: Advisor) | General Electives |
| 34 | General Elective | 3 | General Electives (Upper-level See: Advisor) | General Electives |
| 35 | General Elective | 1-3 | General Electives (Upper-level See: Advisor) (<i>As needed to reach 120 total credits and 45 total upper level credits</i>) | General Electives |
| 36 | Supporting Core Courses and Gen Ed: Information Technology | 3 | Approved Info Tech Course (Upper-level) ⁶ | Major & Info Tech |

B.A. BIOLOGY DEGREE TOTAL 120 - 124

Important Academic Information:

¹Students who complete ENG 111 after Spring 2024 will earn ENGH elective for ENG 111 and ENGH 101 for ENG 112.

²Students may also use MTH 161/162.

³Students who opt to complete language courses at NOVA may need to replace these credits with upper level general electives at Mason to reach 120 total credits. Consult with your ADVANCE Coach or Biology advisor.

⁴200-level ENG literature classes include: ENG 225, ENG 230, ENG 236, ENG 237, ENG 245, ENG 246, ENG 250, ENG 255, ENG 256, ENG 257, ENG 258, ENG 271, ENG 275, and ENG 279.

⁵For Approved Biology Elective options, the COS College BA Requirement options, and the approved Foreign Language courses, please visit:
<https://catalog.gmu.edu/colleges-schools/science/biology/biology-ba/#requirementstext>. If foreign language completed at Mason, students may opt to take a two course, 101/102 sequence if available.

⁶For approved Mason Core courses, please visit - <https://catalog.gmu.edu/mason-core/>

General Education Waiver Policy and Guidance:

- Students who complete a VCCS transfer associate degree (AS, AA, or AFA) will receive a waiver of the Foundation and Exploration (lower division) Mason Core general education categories, which can be found here: <https://catalog.gmu.edu/mason-core/>. To be eligible for the waiver, the students must provide the Mason Office of Admissions with a final, official transcript reflecting the degree conferral date. As a prerequisite for ENGH 302, ENGH 101 is not waived. Students must complete ENGH 100 or ENGH 101, or an equivalent, with a C or higher.
- When a course fulfills a Mason Core requirement **and** a major or college requirement (e.g. Major & Quant), students must complete the course listed on the pathway to fulfill the major/college requirement. Courses that fulfill only Mason Core Foundation and Exploration categories are recommendations. In most pathways, ADVANCE students must complete a Quantitative Reasoning course to matriculate through ADVANCE.
- ADVANCE students must complete the associate degree indicated on their pathway (see the ADVANCE Program Milestones listed above). Students who withdraw from ADVANCE and transfer without the associate degree or UCGS are required to complete each Mason Core general education category.

Additional General Notes & Resources:

1. Biology majors must earn a minimum grade of 'C' in all of the biology core courses.
 2. Students may not count BIOL 124 Human Anatomy and Physiology and/or BIOL 125 Human Anatomy and Physiology toward any biology major requirement.
 3. Students who transfer in both BIOL 303 Animal Biology and BIOL 304 Plant Biology will satisfy BIOL 300 BioDiversity plus four credits of biology elective coursework.
 4. BIOL 495 Directed Studies in Biology, and BIOL 497 Special Problems in Biology do not count toward the upper-level laboratory course requirement. The courses do, however, count as non-laboratory electives. The total limit for BIOL 493 Honors Research in Biology, BIOL 495 Directed Studies in Biology and BIOL 497 Special Problems in Biology combined is 3 credits toward the BA.
- Students interested in Pre-Health Professions (Pre-Med, Pre-Dentistry, Pre-Podiatry, Pre-Optometry, Pre-Veterinary, Pre-Pharmacy, Pre-Physician Assistant, Pre-Occupational Therapy, and Pre-Physical Therapy) are strongly encouraged to meet with the Health Professions Advisor regarding the appropriate prerequisite courses for their field of choice. For more information, please visit: <https://prehealth.gmu.edu/>
 - For academic policies and procedures, please see Mason catalog - <https://catalog.gmu.edu/policies/>
 - Students seeking a bachelor's degree must apply at least 45 credits of upper-level courses (numbered 300 or above) toward graduation.