

A.S. Health Sciences / B.S. Integrative Studies: Life Sciences

Intended for pre-health professions

2024-2025

A.S. Health Sciences

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 complete their NOVA degree 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 Mason Core Quantitative Reasoning course equivalent with a C or better no later than one semester before NOVA graduation. Refer to your pathway to select the appropriate MTH course(s).

ADVANCE Program-Specific Information:

This pathway to the Life Sciences concentration will allow students to pursue emphasis tracks in Pre-Med, Pre-Dentistry, and Pre-Physician Assistant.

The Bachelor of Science in Integrative Studies brings together research, theory and practice across numerous disciplines. INTS coursework are designed so that you apply what you have learned to the world outside and courses from a variety of disciplines. You will enjoy small classes with ample room for discussion, collaborative learning, and experiential learning, including in community projects, volunteer opportunities, field work, internships and work with faculty on research that directly engages current social and global challenges.

Students interested in Pre-Health Professions should meet with a Mason Advisor regarding the appropriate prerequisite courses for their field of choice. For more information, please visit: https://prehealth.gmu.edu/

| | 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 Healthcare | UNIV 100 | General Elective |
| 2 | ENG 111 | 3 | ENG 111 College Composition I ¹ | ENGH XXX | General Elective |
| 3 | Transfer Elective #1 | 4 | BIO 101 General Biology I | BIOL 103/105 | General Elective /Prerequisite |
| ١, | 4 MTH 154 or Higher | 3-5 | Pre-Med: MTH 167 PreCalculus with Trigonometry ² | MATH 105 | Quantitative or General Elective |
| 4 | | 3-5 | Pre-Dental and Pre-Physician's Assistant: MTH 154 Quantitative Reasoning | MATH 106 | |
| 5 | BIO 101 or BIO 141 | 4 | BIO 141 Human Anatomy and Physiology I | BIOL 124 | Major |
| 6 | PSY 200 or PSY 230 | 3 | PSY 200 Principles of Psychology | PSYC 100 | Major & Soc/Behav |
| 7 | HIM 111 | 3 | HIM 111 Medical Terminology | HAP 202 | General Elective or Major |
| 8 | BIO 102 or BIO 142 | 4 | BIO 142 Human Anatomy and Physiology II | BIOL 125 | Major or General Elective |
| 9 | ENG 112 | 3 | ENG 112 College Composition II ¹ | ENGH 101 | Written Comm |
| 10 | CST Course | 3 | CST 100 Principles of Public Speaking OR CST 110 Introduction to Human Communication | COMM 100 COMM 101 | Oral Comm |

| Transfer Elective #4 | 4 | BIO 206 Cell Biology | BIOL 213 | Major |
|----------------------------|-----|--|----------------|----------------------------|
| Science Course | 4 | CHM 112 General Chemistry II | CHEM 212-214 | Major & Natura Science |
| | | Any 200-Level ENG Literature course ⁴ | | |
| | | ENG 275 Women in Literature OR | | |
| | | ENG 258 African American Literature OR | 255 only) | |
| Humanities/Fine Arts #2 | 3 | ENG 255 World Literature OR | FRLN L330 (ENG | Literature |
| | | ENG 246 American Literature OR | ENGH 202 or | |
| | | ENG 245 British Literature OR | | |
| | | ENG 225 Reading Literature OR | | |
| | | HIS 112 World Civilizations Post-1500 CE (recommended) | HIST 125 | - , |
| HIS Elective | 3 | HIS 102 Western Civilizations Post-1600 CE OR | HIST 102T | Global History |
| | | HIS 101 Western Civilizations Pre-1600 CE OR | HIST 101T | |
| | | MTH 245 Statistics I | STAT 250 | |
| MTH 245 or Higher | 3-4 | Pre-Dental and Pre-Physician's Assistant: | CTAT 252 | Major |
| | | MTH 263 Calculus I | MATH 113 | |
| | | Pre-Med: | | |
| Transfer Elective #3 | 4 | CHM 111 General Chemistry I ³ | CHEM 211-213 | Major & Natura Science |
| | | Students who need MTH 167 will take this INTS elective at Mason ² | | |
| Transfer Elective #2 | 0-4 | Pre-Med: | INTS 204 | Major |
| | | INTS 204 Leadership Theory and Practice | | |
| | | Pre-Dental and Pre-Physician's Assistant: | | |
| Social/Behavioral Sciences | 3 | SOC 200 Introduction to Sociology | SOCI 101 | Major or Gener Elective |
| | | MUS 121 Music in Society | MUSI 101 | |
| | | CST 151 Film Appreciation I OR | ENGH L372 | |
| Humanities/Fine Arts #1 | 3 | CST 130 Introduction to Theatre OR | THR 101 | Arts |
| Humanities/Fine Auto#1 | | ART 102 History of Art: Renaissance to Modern OR | ARTH 201 | |
| | | ART 101 History of Art: Prehistoric to Gothic OR | ARTH 200 | |

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

B.S. Integrative Studies - Life Sciences Concentration

60-62

DEGREE TOTAL

This pathway to the Life Sciences concentration provides course requirements for emphasis tracks in Pre-Med, Pre-Dentistry, and Pre-Physician Assistant only.

Life Science concentration courses must be carefully sequenced to complete the degree efficiently and prepare for clinical program applications. Please see your Mason School of Integrative Studies advisor to plan each term.

| | MASON DEGREE REQUIREMENT | Credits | Course | MASON CORE/DEGREE EQUIVALENT |
|----|-----------------------------|---------|---|------------------------------------|
| 20 | Concentration Requirement | 5 | CHEM 313/315 Organic Chemistry I & Lab | Major |
| 21 | Major Requirement | 1 | INTS 391 Understanding Integrative Studies | Major |
| 22 | Concentration Requirement | 4 | INTS 410 Contemporary Health: Intersections in Science and Society | Major |
| 23 | Concentration Requirement | 3 | INTS 303 Introduction to International Studies OR INTS 406 Global Leadership | Major |
| 24 | Concentration Requirement | 4 | Upper level INTS Elective (See: Advisor) (INTS 456 recommended) | Major |
| 25 | Concentration Requirement | 4 | INTS 249 Digital Literacy | Major |
| 26 | Concentration Requirement | 3 | PHIL 309 Bioethics OR PHIL 344 Ethical Issues in Global Health | Major |

| 7 Concentration Requirement | 3 | ANTH 363 Humans, Disease, and Death OR ANTH 381 Medical Anthropology OR SOCI 390 Sociology of Health, Illness, and Disability OR WMST 319 Gender, Health, and Culture in the United States OR WMST 404 Gender, Sexuality, and Disability | Major |
|--|-------------|--|--------------|
| Gen Ed: Written | | William 404 defider, Sexuality, and Disability | |
| 8 Communication (Upper-level) | 3 | ENGH 302 Advanced Composition | Written Comm |
| 9 Concentration Requirement | 4 | Upper Level INTS Elective (See: Advisor) (INTS 490 recommended) | Major |
| Students m | nust select | one of the emphasis area options below. See Mason INTS advisor to plan courses | s by term. |
| O Concentration Requirements: Pre-Med | 28 | BIOL 311 General Genetics BIOL 483 General Biochemistry OR CHEM 463 General Biochemistry I CHEM 314/318 Organic Chemistry II & Lab (5 credits) INTS Elective (4 credits) (See: Advisor) ² PHYS 243/244 College Physics I & Lab PHYS 245/246 College Physics II & Lab STAT 250 Introductory Statistics I ² | Major |
| Concentration Requirements: Pre-Dental | 21 | BIOL 311 General Genetics CHEM 314/318 Organic Chemistry II & Lab (5 credits) BIOL 483 General Biochemistry OR CHEM 463 General Biochemistry I PHYS 243/244 College Physics I & Lab PHYS 245/246 College Physics II & Lab | Major |
| Concentration Requirements: Pre- Physician's Assistant | 18 | BIOL 305/306 Biology of Microorganisms & Lab BIOL 483 General Biochemistry OR CHEM 463 General Biochemistry I PSYC 211 Developmental Psychology OR PSYC 325 Psychopathology | Major |
| 3 Concentration Requirement | 3 | INTS Elective (See: Advisor) | Major |
| 5 concentration requirement | | | |

Denotes a course that must be taken at George Mason University while attending NOVA. Failure to complete your co-enrollment course(s) while attending NOVA can significantly affect your timeline for Mason graduation. Please see your ADVANCE Coach for more information and to enroll.

Important Academic Information:

DEGREE TOTAL

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

²Pre-med students who places directly into MTH 263 Calculus I should complete MTH 245 at NOVA and INTS 204 through co-enrollment while at NOVA. If INTS 204 is completed prior to transfer, students will not need the INTS elective listed in the Pre-med row at Mason.

³Students must qualify to take MTH 161 in order to take CHM 111. For more information on math placement, see the student groups tab in SIS. Students who have not qualified for MTH 161 will need MDE 60 prior to taking CHM 111.

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.

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 <u>and</u> 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:

- Students must earn a minimum grade of C in all major courses.
- 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.