

BIOLOGY, BA

Banner Code: SC-BA-BIOL

Academic Advising

1200 Exploratory Hall
Fairfax Campus

Website: biology.gmu.edu/academics/degree-programs/

The Bachelor of Arts in Biology provides a sound liberal arts education with substantial experience in quantitative and analytical thought, along with preparation for related professions. The program provides the strong background necessary for not only for graduate study in the life sciences, but also enables students to develop careers in a wide variety of disciplines, including teaching, environmental management, microbiology, molecular biology, biotechnology, genetics, wildlife management, fisheries biology, and marine science. Furthermore, our curriculum prepares students for careers in the health sciences including medicine, dentistry, veterinary science, and related allied health disciplines.

Admissions & Policies

Admissions

University-wide admissions policies can be found in the Undergraduate Admissions Policies (<http://catalog.gmu.edu/admissions/undergraduate-policies/>) section of this catalog.

To apply for this program, please complete the George Mason University Admissions Application (<https://www2.gmu.edu/admissions-aid/apply-now/>).

Policies

Students must fulfill all Requirements for Bachelor's Degrees (<http://catalog.gmu.edu/policies/academic/undergraduate-policies/#ap-5-3-2>), including the Mason Core (<http://catalog.gmu.edu/mason-core/>). Students in this bachelor's program must also complete the additional College Requirements for the BA Degree (see Requirements).

The writing intensive requirement is fulfilled by BIOL 308 Foundations of Ecology and Evolution. Transfer students who have transferred in BIOL 308 Foundations of Ecology and Evolution but did not meet the writing intensive requirement may take MLAB 300 Science Writing to meet the writing intensive requirement.

Important information and departmental policies are listed with the Department of Biology (<http://catalog.gmu.edu/colleges-schools/science/biology/>).

For policies governing all undergraduate programs, see AP.5 Undergraduate Policies (<http://catalog.gmu.edu/policies/academic/undergraduate-policies/>).

Important Program Requirements

Students must complete the degree requirements with:

- A minimum GPA of 2.00 in the BIOL courses listed in the degree program

- A minimum GPA of 2.00 in the supporting courses listed in the degree program

Additionally:

- Students may apply no more than 4 credits of BIOL 103 Introductory Biology I (Mason Core) (<http://catalog.gmu.edu/mason-core/>) or BIOL 107 Intro Biology II Lecture (Mason Core) (<http://catalog.gmu.edu/mason-core/>) and BIOL 106 Introductory Biology II Laboratory (Mason Core) (<http://catalog.gmu.edu/mason-core/>) toward elective credit (or equivalent transfer credit at the 100 to 200-level) if taken before the successful completion of BIOL 213 Cell Structure and Function (Mason Core) (<http://catalog.gmu.edu/mason-core/>).
- Biology majors must earn a minimum grade of 'C' in all of the biology core courses. A grade of 'C' or better must be earned in BIOL 213 Cell Structure and Function (Mason Core) (<http://catalog.gmu.edu/mason-core/>) in order to advance to other core requirements.
- Students may repeat BIOL 213 Cell Structure and Function (Mason Core) (<http://catalog.gmu.edu/mason-core/>) once, but a second time only with permission of the Department of Biology (<http://catalog.gmu.edu/colleges-schools/science/biology/>).
- Students may **not** count BIOL 124 Human Anatomy and Physiology and/or BIOL 125 Human Anatomy and Physiology toward any biology major requirement.
- Students who take BIOL 300 BioDiversity may **not** count BIOL 303 Animal Biology and/or BIOL 304 Plant Biology toward any biology major requirement.
- BIOL 308 Foundations of Ecology and Evolution meets the writing intensive requirement for this major. Transfer students who have transferred in BIOL 308 Foundations of Ecology and Evolution but did not meet the writing intensive requirement may take MLAB 300 Science Writing to meet the writing intensive requirement.
- BIOL 493 Honors Research in Biology, BIOL 495 Directed Studies in Biology, and BIOL 497 Special Problems in Biology do not satisfy the requirements of the BA degree which state that students must complete at least one upper division course that includes a laboratory. 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 32 credits for the BA.

Teacher Licensure

Students majoring in biology who wish to pursue a career teaching secondary school may consider applying for the Secondary Education - Biology (6-12) Undergraduate Certificate (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/secondary-education-biology-6-12-undergraduate-certificate/>) offered by the College of Education and Human Development (<http://catalog.gmu.edu/colleges-schools/education-human-development/>) as an option in seeking an initial Virginia teaching license.

Other routes to licensure include the Biology, BA or BS/Curriculum and Instruction, Accelerated MEd (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/curriculum-instruction-med/#acceleratedmasterstext>) (Secondary Education Biology Concentration) or select traditional Master's programs. Please contact

the undergraduate advisor in the College of Education and Human Development (<http://catalog.gmu.edu/colleges-schools/education-human-development/>) for more information.

Requirements

Degree Requirements

Total credits: minimum 120

Students should refer to the Admissions & Policies tab for specific policies related to this program.

Biology, BA majors are required to complete the following coursework with the option of also completing the Biological Illustration Concentration.

Biology Core Courses

Code	Title	Credits
BIOL 213	Cell Structure and Function (Mason Core) (http://catalog.gmu.edu/mason-core/)	4
BIOL 214	Biostatistics for Biology Majors	4
BIOL 300	BioDiversity	4
BIOL 308	Foundations of Ecology and Evolution ¹	5
BIOL 311	General Genetics	4
Total Credits		21

¹ Fulfills the writing intensive requirement. Transfer students who have transferred in BIOL 308 Foundations of Ecology and Evolution but did not meet the writing intensive requirement may take MLAB 300 Science Writing to meet the writing intensive requirement.

Biology Electives

Code	Title	Credits
Complete 11 credits of additional biology courses (http://catalog.gmu.edu/courses/biol/) ¹		11

¹ Of which, at least 7 credits must be upper division, and at least one of these upper division courses must include a laboratory.

Chemistry

Code	Title	Credits
CHEM 211 & CHEM 213	General Chemistry I (Mason Core) (http://catalog.gmu.edu/mason-core/) and General Chemistry Laboratory I (Mason Core) (http://catalog.gmu.edu/mason-core/) (Natural Science course)	4
CHEM 212 & CHEM 214	General Chemistry II (Mason Core) (http://catalog.gmu.edu/mason-core/) and General Chemistry Laboratory II (Mason Core) (http://catalog.gmu.edu/mason-core/) (Natural Science course)	4
Total Credits		8

Math

Code	Title	Credits
Select one from the following:		3-6
MATH 111	Linear Mathematical Modeling (Mason Core) (http://catalog.gmu.edu/mason-core/) (Quantitative Reasoning courses)	
or MATH 113 Analytic Geometry and Calculus I (Mason Core) (http://catalog.gmu.edu/mason-core/)		
MATH 123 & MATH 124	Calculus with Algebra/Trigonometry, Part A and Calculus with Algebra/Trigonometry, Part B (Mason Core) (http://catalog.gmu.edu/mason-core/)	
Total Credits		3-6

Computer Science

Code	Title	Credits
Select one from the following:		3
CDS 130	Computing for Scientists ¹	
Any course(s) that fulfills the Mason Core: Information Technology requirement (http://catalog.gmu.edu/mason-core/#information-technology)		
Total Credits		3

¹ Recommended by the Department of Biology

Natural Science

Code	Title	Credits
Select 6-8 credits from the following Mason Core: Natural Science courses:		6-8
ASTR 103	Astronomy (Mason Core) (http://catalog.gmu.edu/mason-core/)	
ASTR 111	The Solar System (Mason Core) (http://catalog.gmu.edu/mason-core/)	
ASTR 113	Stars, Galaxies, and the Universe (Mason Core) (http://catalog.gmu.edu/mason-core/)	
GEOL 101	Introductory Geology I (Mason Core) (http://catalog.gmu.edu/mason-core/)	
GEOL 102	Historical Geology (Mason Core) (http://catalog.gmu.edu/mason-core/)	
PHYS 160	University Physics I (Mason Core) (http://catalog.gmu.edu/mason-core/)	
PHYS 243	College Physics I (Mason Core) (http://catalog.gmu.edu/mason-core/)	
PHYS 245	College Physics II (Mason Core) (http://catalog.gmu.edu/mason-core/)	
PHYS 260	University Physics II (Mason Core) (http://catalog.gmu.edu/mason-core/)	
Total Credits		6-8

Concentration in Biological Illustration (BIOI)

This optional concentration consists of a selection of courses designed to address the needs and interests of students who wish to study biology and simultaneously have the aptitude to draw, animate, or design art for textbooks, videos, papers, etc. This concentration has significant biology, chemistry, and physics components like all biology majors, and includes

art classes that will prepare students for the opportunity to use their love of biology and art in one degree.

Code	Title	Credits
AVT 180	New Media in the Creative Arts	3
AVT 222	Drawing I (Mason Core) (http://catalog.gmu.edu/mason-core/)	4
AVT 385	EcoArt (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
or AVT 497	Senior Project (Mason Core) (http://catalog.gmu.edu/mason-core/)	
Choose 12 additional art credits from the following courses:		12
AVT 323	Drawing II	
AVT 324	Figure Drawing	
AVT 327	Illustration	
AVT 328	Mixed Media	
AVT 382	2D Experimental Animation	
AVT 383	3D Experimental Animation	
AVT 422	Drawing III	
Total Credits		22

Note for Students Expecting to Enter Graduate or Professional School

Students expecting to enter graduate or professional school are strongly encouraged to complete:

Code	Title	Credits
MATH 113 & MATH 114	Analytic Geometry and Calculus I (Mason Core) (http://catalog.gmu.edu/mason-core/) and Analytic Geometry and Calculus II	8
CHEM 313 & CHEM 315	Organic Chemistry I and Organic Chemistry Lab I	5
CHEM 314 & CHEM 318	Organic Chemistry II and Organic Chemistry Lab II	5
PHYS 243 & PHYS 244	College Physics I (Mason Core) (http://catalog.gmu.edu/mason-core/) and College Physics I Lab (Mason Core) (http://catalog.gmu.edu/mason-core/)	4
PHYS 245 & PHYS 246	College Physics II (Mason Core) (http://catalog.gmu.edu/mason-core/) and College Physics II Lab (Mason Core) (http://catalog.gmu.edu/mason-core/)	4

Mason Core and Elective Requirements

In order to meet a minimum of 120 credits, this degree requires an additional credits (specific credit counts by concentration are shown below), which may be applied toward any remaining Mason Core (<http://catalog.gmu.edu/mason-core/>) requirements (outlined below), Requirements for Bachelor's Degrees (<http://catalog.gmu.edu/policies/academic/undergraduate-policies/#text>) (refer to AP.5.3.2), College Requirements for the BA Degree (outlined below), and elective courses. Students are strongly encouraged to consult with their advisors to ensure that they fulfill all requirements.

- Without concentration: 63-68 credits
- BIOI concentration: 41-46 credits

Mason Core

Some Mason Core (<http://catalog.gmu.edu/mason-core/>) requirements may already be fulfilled by the major requirements listed above. Students are strongly encouraged to consult their advisors to ensure they fulfill all remaining Mason Core (<http://catalog.gmu.edu/mason-core/>) requirements.

Code	Title	Credits
Foundation Requirements		
	Written Communication (ENGH 101) (http://catalog.gmu.edu/mason-core/#written)	3
	Oral Communication (http://catalog.gmu.edu/mason-core/#oral)	3
	Quantitative Reasoning (http://catalog.gmu.edu/mason-core/#quantitative)	3
	Information Technology and Computing (http://catalog.gmu.edu/mason-core/#information-technology)	3
Exploration Requirements		
	Arts (http://catalog.gmu.edu/mason-core/#arts)	3
	Global Understanding (http://catalog.gmu.edu/mason-core/#global)	3
	Literature (http://catalog.gmu.edu/mason-core/#literature)	3
	Natural Science (http://catalog.gmu.edu/mason-core/#natural-science)	7
	Social and Behavioral Sciences (http://catalog.gmu.edu/mason-core/#social-behavioral-science)	3
	Western Civilization/World History (http://catalog.gmu.edu/mason-core/#western-civilization-world-history)	3
Integration Requirements		
	Written Communications (ENGH 302) (http://catalog.gmu.edu/mason-core/#written)	3
	Writing-Intensive (http://catalog.gmu.edu/mason-core/#wi) ¹	3
	Synthesis/Capstone (http://catalog.gmu.edu/mason-core/#synthesis-capstone) ²	3
Total Credits		40

¹ Most programs include the writing-intensive course designated for the major as part of the major requirements; this course is therefore not counted towards the total required for Mason Core.

² Minimum 3 credits required.

College Requirements for the BA Degree

In addition to the program requirements and the Mason Core (<http://catalog.gmu.edu/mason-core/>) requirements, students pursuing a BA degree must complete the coursework below. Except where expressly prohibited, a course used to fulfill this college-level requirement may also be used simultaneously to satisfy other requirements such as Mason Core (<http://catalog.gmu.edu/mason-core/>) requirements, other college-level requirements, or requirements for the major. In some cases, the requirements listed below may be superseded by requirements of the degree program and the Mason Core (<http://catalog.gmu.edu/mason-core/>).

Philosophy or Religious Studies

Code	Title	Credits
Select 3 credits from the following:		
		3
PHIL	(http://catalog.gmu.edu/courses/phil/) ¹	
RELI	(http://catalog.gmu.edu/courses/reli/)	

¹ PHIL 323 Classical Western Political Theory and PHIL 324 Modern Western Political Theory may not be used to fulfill this requirement.

Social and Behavioral Sciences

Choose one approved Mason Core: Social and Behavioral Sciences (<http://catalog.gmu.edu/mason-core/#social-behavioral-science>) course in addition to the Mason Core (<http://catalog.gmu.edu/mason-core/>)-required course for a total of 6 credits. The two courses used to fulfill the combined college-level and university requirements must be from different disciplines.

This requirement may be fulfilled by completing any course in ANTH (<http://catalog.gmu.edu/courses/anth/>), CRIM (<http://catalog.gmu.edu/courses/crim/>), ECON (<http://catalog.gmu.edu/courses/econ/>), GOVT (<http://catalog.gmu.edu/courses/govt/>), HIST (<http://catalog.gmu.edu/courses/hist/>)¹, LING (<http://catalog.gmu.edu/courses/ling/>), PSYC (<http://catalog.gmu.edu/courses/psyc/>), or SOCI (<http://catalog.gmu.edu/courses/soci/>), and the following GGS (<http://catalog.gmu.edu/courses/ggs/>) courses:

Code	Title	Credits
Select any course from the disciplines above or select from the following GGS courses:		
		3
GGG 101	Major World Regions (Mason Core) (http://catalog.gmu.edu/mason-core/)	
GGG 103	Human Geography (Mason Core) (http://catalog.gmu.edu/mason-core/)	
GGG 110	Introduction to Geoinformation Technologies	
GGG 301	Political Geography	
GGG 303	Geography of Resource Conservation (Mason Core) (http://catalog.gmu.edu/mason-core/)	
GGG 304	Population Geography (Mason Core) (http://catalog.gmu.edu/mason-core/)	
GGG 305	Economic Geography	
GGG 306	Urban Geography	
GGG 315	Geography of the United States	
GGG 316	Geography of Latin America	
GGG 320	Geography of Europe	
GGG 325	Geography of North Africa and the Middle East	
GGG 330	Geography of the Soviet Succession States	
GGG 357	Urban Planning	
GGG 380	Geography of Virginia	
Total Credits		3

¹ HIST 100 History of Western Civilization (Mason Core) (<http://catalog.gmu.edu/mason-core/>) and HIST 125 Introduction to World History (Mason Core) (<http://catalog.gmu.edu/mason-core/>) may not be used to fulfill this requirement.

Natural Science

Choose one credit in addition to the Mason Core: Natural Science (<http://catalog.gmu.edu/mason-core/#natural-science>) requirement for a total of 8 credits. This combined college-level and university requirement must be fulfilled by completing two of any approved Mason Core: Natural Science (<http://catalog.gmu.edu/mason-core/#natural-science>) courses that include a laboratory experience¹.

Code	Title	Credits
Select an additional Mason Core Natural Science course		
		1

¹ BIOL 124 Human Anatomy and Physiology and BIOL 125 Human Anatomy and Physiology may not be used to fulfill this requirement.

Foreign Language

Intermediate-level proficiency in one foreign language is required¹. This requirement may be fulfilled by completing a course in a foreign language numbered 202, 209, or 210 (or higher-level courses taught in the language).

Code	Title	Credits
Select a foreign language course numbered 202, 209, 210, or higher if a waiver isn't applicable		
		0-3

¹ Students may be eligible for a waiver of this requirement if they are already proficient in a second language or if they have received a satisfactory score on an approved proficiency test. Additional information on waivers can be found via the college's Office of Academic and Student Affairs (<https://cos.gmu.edu/uaa/>).

Non-Western Culture

Choose one approved Non-Western Culture Requirement¹ course in addition to the course used to fulfill the Mason Core: Global Understanding (<http://catalog.gmu.edu/mason-core/#global>) requirement. A course used to fulfill the Mason Core: Global Understanding (<http://catalog.gmu.edu/mason-core/#global>) requirement may not be simultaneously used to satisfy this college-level requirement. However, a course used to fulfill this requirement may be used simultaneously to fulfill any *other* requirements (Mason Core (<http://catalog.gmu.edu/mason-core/>) requirements, college-level requirements, or requirements for the major).

Code	Title	Credits
Select 3 credits from approved Non-Western Culture courses if a waiver isn't applicable:		
		0-3
ANTH 114	Introduction to Cultural Anthropology (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ANTH 300	Civilizations	3
ANTH 302	Peoples and Cultures of Latin America (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ANTH 307	Ancient Mesoamerica (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ANTH 308	Peoples and Cultures of the Middle East (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ANTH 309	Peoples and Cultures of India (Mason Core) (http://catalog.gmu.edu/mason-core/)	3

ANTH 313	Myth, Magic, and Mind (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	FREN 451	Topics in Sub-Saharan Francophone Literature and Culture	3
ANTH 314	Zombies	3	FREN 454	Topics in Caribbean Francophone Literature and Culture	3
ANTH 330	Peoples and Cultures of Selected Regions: Non-Western	3	GGG 101	Major World Regions (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ANTH 332	Cross-Cultural Perspectives on Globalization (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	GGG 316	Geography of Latin America	3
ANTH 381	Medical Anthropology	3	GGG 325	Geography of North Africa and the Middle East	3
ANTH 396	Issues in Anthropology: Social Sciences (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	GGG 330	Geography of the Soviet Succession States	3
ARAB 360	Topics in Arabic Cultural Production	3	GGG 399	Select Topics in GGS	3
ARAB 420	Survey of Arabic Literature	3	GOVT 328	Global Political Theory	3
ARAB 440	Topics in Arabic Religious Thought and Texts (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	GOVT 332	Government and Politics of the Middle East and North Africa	3
ARTH 203	Survey of Asian Art (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	GOVT 333	Government and Politics of Asia	3
ARTH 204	Survey of Latin American Art (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	GOVT 338	Government and Politics of Russia	3
ARTH 206	Survey of African Art (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	GOVT 340	Central Asian Politics	3
ARTH 318	Art and Archaeology of Ancient Egypt	3	GOVT 341	Chinese Foreign Policy	3
ARTH 319	Art and Archaeology of the Ancient Near East (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	GOVT 345	Islam and Politics	3
ARTH 320	Art of the Islamic World (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	GOVT 433	Political Economy of East Asia	3
ARTH 382	Arts of India (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 251	Survey of East Asian History (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ARTH 383	Arts of Southeast Asia (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 252	Survey of East Asian History (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ARTH 384	Arts of China (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 261	Survey of African History (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ARTH 385	Arts of Japan (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 262	Survey of African History (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ARTH 386	The Silk Road (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 271	Survey of Latin American History (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ARTH 482	RS: Advanced Studies in Asian Art	3	HIST 272	Survey of Latin American History (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
CHIN 318	Introduction to Classical Chinese (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 281	Survey of Middle Eastern Civilization (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
CHIN 320	Contemporary Chinese Film	3	HIST 282	Survey of Middle Eastern Civilization (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
CHIN 325	Major Chinese Writers (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 326	Stalinism	3
CHIN 470	Special Topics in Chinese Studies	3	HIST 327	The Soviet Union and Russia Since World War II	3
DANC 118	World Dance (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 328	Rise of Russia (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ECON 361	Economic Development of Latin America (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 329	Modern Russia and the Soviet Union (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
ECON 362	African Economic Development (Mason Core) (http://catalog.gmu.edu/mason-core/)	3	HIST 353	History of Traditional China	3
			HIST 354	Modern China (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
			HIST 356	Modern Japan (Mason Core) (http://catalog.gmu.edu/mason-core/)	3

HIST 357	Postwar Japan (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
HIST 358	Post-1949 China (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
HIST 360	History of South Africa (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
HIST 364	Revolution and Radical Politics in Latin America (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
HIST 365	Conquest and Colonization in Latin America (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
HIST 366	Comparative Slavery	3
HIST 367	History, Fiction, and Film in Latin America	3
HIST 387	Topics in Global History (Mason Core) (http://catalog.gmu.edu/mason-core/)	3-6
HIST 426	The Russian Revolution	3
HIST 460	Modern Iran (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
HIST 461	Arab-Israeli Conflict	3
HIST 462	Women in Islamic Society (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
HIST 465	The Middle East in the 20th Century	3
JAPA 310	Japanese Culture in a Global World (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
JAPA 340	Topics in Japanese Literature (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
KORE 320	Korean Popular Culture in a Global World	3
MUSI 103	Musics of the World (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
RELI 211	Religions of the West (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
RELI 212	Religions of Asia	3
RELI 240	Death and the Afterlife in World Religions	3
RELI 272	Islam	3
RELI 313	Hinduism (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
RELI 314	Chinese Philosophies and Religious Traditions	3
RELI 315	Buddhism (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
RELI 337	Mysticism: East and West	3
RELI 365	Muhammad: Life and Legacy	3
RELI 374	Islamic Thought (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
RELI 375	Qur'an and Hadith	3
RELI 379	Islamic Law, Society, and Ethics	3
RELI 387	Islam, Democracy, and Human Rights	3
RELI 490	Comparative Study of Religions (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
RUSS 353	Russian Civilization (Mason Core) (http://catalog.gmu.edu/mason-core/)	3

RUSS 354	Contemporary Post-Soviet Life (Mason Core) (http://catalog.gmu.edu/mason-core/)	3
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¹ Students who can document attendance at a native school in a non-western country for at least four years may request a waiver from this requirement through the CHSS Undergraduate Academic Affairs Office (<http://chssundergrad.gmu.edu/>).

Honors

Honors in the Major

Admissions

Minimum requirements for invitation:

- GPA in biology courses must be 3.33 or better
- GPA in supporting requirements (math and other science) must be 3.00 or better
- Grade of 'B' or better in BIOL 213 Cell Structure and Function (Mason Core) (<http://catalog.gmu.edu/mason-core/>)

Students should apply for admission to the Honors Program during their first or second year at the university. Contact the Department of Biology (<http://catalog.gmu.edu/colleges-schools/science/biology/>) for information on applying.

Retention Requirements

Students in honors biology must maintain a biology GPA of 3.33 or better and a supporting GPA of 3.00 or better from the time they have accumulated 30 hours and thereafter. Students who fall below this standard will be given a one semester probationary period in which to bring their GPA back up to the minimum standard.

Requirements to Graduate with Biology Honors

Students are required to take 6 to 8 credits in honors courses in BIOL including three semesters of BIOL 494 Honors Seminar in Biology or two semesters of BIOL 494 Honors Seminar in Biology and one semester of BIOL 493 Honors Research in Biology. BIOL 498 Research Seminar may count toward one of the semester requirements of BIOL 494 Honors Seminar in Biology. The GPA requirements are as follows:

- Minimum 3.33 GPA in honors biology courses
- Minimum 3.33 GPA in biology requirements
- Minimum 3.00 GPA in supporting requirements
- Minimum 3.00 GPA overall

Accelerated Master's

Biology, BA or BS/Curriculum and Instruction, Accelerated MEd (Secondary Education Biology concentration)

Overview

Highly-qualified undergraduates may be admitted to the bachelor's/accelerated master's program and obtain a BA or BS in Biology (<http://catalog.gmu.edu/colleges-schools/science/biology/biology-bs/>) (degree without concentration) and an MEd in Curriculum and Instruction (concentration in secondary education biology) (<http://catalog.gmu.edu/>)

colleges-schools/education-human-development/school-education/curriculum-instruction-med/) in an accelerated time-frame after satisfactory completion of 149 credits. See AP.6.7 Bachelor's/Accelerated Master's Degree (<http://catalog.gmu.edu/policies/academic/graduate-policies/#ap-6-7>) for policies related to this program.

This accelerated option is offered jointly by the Biology Undergraduate Program (<http://catalog.gmu.edu/colleges-schools/science/biology/>) and the Graduate School of Education (<http://catalog.gmu.edu/colleges-schools/education-human-development/school-education/>).

Students in an accelerated degree program must fulfill all university requirements for the master's degree. For policies governing all graduate degrees, see AP.6 Graduate Policies (<http://catalog.gmu.edu/policies/academic/graduate-policies/#text>).

Application Requirements

Applicants to all graduate programs at George Mason University must meet the admission standards and application requirements for graduate study as specified in Graduate Admissions Policies (<http://catalog.gmu.edu/admissions/graduate-policies/>). For information specific to this accelerated master's program, see Application Requirements and Deadlines (<https://cehd.gmu.edu/bachelors-accelerated-masters-program/>).

Accelerated Option Requirements

Students must complete the following courses in their senior year:

Senior			
Fall Semester	Credits	Spring Semester	Credits
SEED 540	3	EDRD 619	3
SEED 573	3	SEED 673	3
6		6	

Total Credits 12

While undergraduate students, accelerated master's students are able to apply two of the courses listed above to both the bachelor's and master's degrees. These courses are considered advanced standing for the MEd. A minimum grade of B must be earned to be eligible to count as advanced standing. The other two courses are taken as reserve graduate credit and do not apply to the undergraduate degree. Early in their final undergraduate semester, students must submit the Bachelor's/Accelerated Master's Transition Form to the CEHD Admissions Office and specify which of the four courses are to be designated as advanced standing and reserve graduate credit.