



School of
Integrative Studies

Degree Requirements
Natural Science for Education
(Licensure Area: Secondary Education)

www.integrative.gmu.edu

Description

This concentration prepares students for careers working in middle and high school settings. This degree meets the Virginia Department of Education licensure requirements for Science teachers and will prepare students for graduate licensure programs.

About Integrative Studies/Philosophy

The Bachelor of Science degree program in integrative studies is based on intensive, interdisciplinary learning communities coordinated with traditional academic programs. The result is an integrated program of study that emphasizes collaboration, experiential learning, and self-reflection. The degree program requires mastery of eight essential competencies: communication, global understanding, group interaction, aesthetic awareness, critical thinking, civic engagement, digital literacy, and well-being.

Learning Communities (24 credits)

Learning communities are interdisciplinary courses that combine different subjects into a single course that is usually 3 or 6 credits. In learning communities, faculty and students explore various ways to understand a topic. Learning communities are structured to help promote a greater sense of identity with an academic community. Hallmarks of Integrative Studies learning communities are team teaching, collaborative projects, emphasis on writing and critical thinking, and opportunity for independent study. They often include experiential learning, either as an integral part of the class or as an optional add on.

Experiential Learning (12 credits)

Experiential learning includes internships, study abroad, community service learning, course field trips, and other field study opportunities. The learning sites may change each semester and are usually off campus. George Mason provides student liability insurance for the experiential learning internship, but students are responsible for their own transportation and health care. Accident and health insurance is available from George Mason.

No more than 24 credits of experiential learning can count toward a student's total credits for graduation.

Required Courses

Required Science Courses: BIOL 103, CHEM 211, GEOL 101

MATH course* (3-4 credits): MATH 106, 113, 114, STAT 250

Additional Course work within chosen science discipline:

Biology: MATH 106 or STAT 250; BIOL 124, 125, 213, 214, 308, 310, 311 (all required)

Chemistry: MATH 113, 114 (both required); CHEM 313/315, 314/318, 321, 331/336, 332/337, 341 (all required)

Earth Science: MATH 106 or STAT 250; ASTR111/112, ASTR 113/114 (both required); GGS 102, 309 (both required); GEOL 102, 309 (both required); GEOL or GGS electives (7 credits)

*courses chosen for these requirements will be determined based on the student's area of focus (e.g. Biology, Chemistry, Earth Science) and are listed in the focus areas above

Sample 4-year plan (example: Earth Science focus)

First Year				Second Year			
Fall Semester		Spring Semester		Fall Semester		Spring Semester	
*INTS Core	6	*INTS Core	6	ASTR 111/112	4	ASTR 113/114	4
*ENGH 101	3	*HIST 125	3	INTS 210	4	GEOL 102	4
*GGS 101	3	*IT 104	3	INTS 3xx/4xx	4	INTS 3xx/4xx	6
*BIOL 103	4	*MATH 106	3	GGS 102	3		
Total:	16	Total:	15	Total:	15	Total:	14
Third Year				Fourth Year			
Fall Semester		Spring Semester		Fall Semester		Spring Semester	
GEOL 101	4	CHEM 211	4	GEOL Elective	4	INTS 490	4
GGG 309	3	GGG Elective	3	INTS 3xx/4xx	3	INTS 3xx/4xx	3
INTS 395	3	INTS 410	4	INTS 395	3	*SOCI 352	3
INTS 3xx/4xx	4	Elective/Minor	3	Elective/Minor	3	Elective/Minor	3
				Elective/Minor	3	Elective/Minor	3
Total:	14	Total:	14	Total:	16	Total:	16

*these courses also fulfill general education requirements

Advising/Further Information

ncc.gmu.edu/programs/la-bs-ints-nse

Integrative Studies

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