

Program Change Request

Date Submitted: 02/23/24 4:10 pm

Viewing: **SC-MS-EVSP : Environmental Science and Policy, MS**

Last approved: 04/28/23 12:36 pm

Last edit: 03/22/24 9:45 am

Changes proposed by: jbazaz

Catalog Pages Using this Program

[Environmental Science and Policy, MS](#)

Are you completing this form on someone else's behalf?

No

Effective Catalog: 2024-2025

Program Level: Graduate

Program Type: Master's

Degree Type: Master of Science

Title: Environmental Science and Policy, MS

Banner Title: MS Environmental Sci & Policy

Registrar/OAPI Use Only – SCHEV Status Approved

Registrar’s Office Use Only – Program Start Term

Registrar/OAPI Use Only – SCHEV Letter

Registrar/OAPI Use Only – SACSCOC Status

In Workflow

1. ESP GR Committee
2. ESP Chair
3. SC Curriculum Committee
4. SC Assistant Dean
5. Assoc Provost-Graduate
6. Registrar-Programs

Approval Path

1. 03/12/24 6:55 pm
Esther Peters (epeters2):
Approved for ESP GR Committee
2. 03/13/24 4:56 pm
Amy Fowler (afowler6):
Approved for ESP Chair

History

1. Nov 8, 2017 by clmig-jwehrheim
2. Feb 28, 2018 by rzachari
3. Mar 8, 2018 by rzachari
4. Mar 16, 2018 by rzachari
5. Mar 19, 2018 by rzachari
6. Mar 7, 2019 by scheselk

Concentration(s):

7. Nov 25, 2019 by
Jennifer Bazaz
Gettys (jbazaz)
8. Jan 30, 2020 by
Jennifer Bazaz
Gettys (jbazaz)
9. Jul 24, 2020 by
Jennifer Bazaz
Gettys (jbazaz)
10. Nov 9, 2020 by
Jennifer Bazaz
Gettys (jbazaz)
11. Jan 29, 2021 by
Jennifer Bazaz
Gettys (jbazaz)
12. Feb 23, 2021 by
jriemen
13. Oct 1, 2021 by
Jennifer Bazaz
Gettys (jbazaz)
14. Dec 2, 2021 by
Jennifer Bazaz
Gettys (jbazaz)
15. Dec 6, 2021 by Tory
Sarro (vsarro)
16. Apr 24, 2023 by
Jennifer Bazaz
Gettys (jbazaz)
17. Apr 28, 2023 by
Tory Sarro (vsarro)

	Associated Concentrations	Registrar's Office Use Only: Concentration Code
1	Aquatic Ecology	AQEC
2	Conservation Science and Policy	COSP
3	Environmental Science and Policy	EVSP
4	Communication for Environmental Science, Policy, and Human Behavior	CESP
5	Environment and Management	EVM

	Associated Concentrations	Registrar's Office Use Only: Concentration Code
6	Energy and Sustainability Policy and Science	ESPS
7	Conservation Medicine & Planetary Health	CMPH

Registrar/IRR Use Only – Concentration CIP Code

College/School: College of Science

Department / Academic Unit: Environmental Science & Policy

Jointly Owned Program? No

Justification

What: Referring applicants to central admissions language and removing extraneous wording.

Why: To make the program more adaptable to changes in university policies.

What: Removing the GRE requirement.

Why: Updating the catalog to match current admissions requirements.

What: Removing policy course options.

Why: These courses are not regularly taught.

What: Clarifying the seminar requirement and making EVPP 991's topic less specific.

Why: We're no longer teaching this seminar topic.

What: Organizing the degree such that the core is differentiated from electives and research, and for titling consistency.

Why: To more clearly outline the core and degree requirements.

What: Adding the option for a written product and public presentation for the Research Project Option.

Why: Faculty requested this option for students as an equivalent to the written and oral examinations, similar to the thesis requirement, and more applicable as a career skill in environmental fields.

What: Adding EVPP 566 and EVPP 567 to the AQEC Concentration.

Why: EVPP 566 and EVPP 567 are now a regularly taught courses of interest to many students in the AQEC Concentration.

**Total Credits
Required:**

Total credits: 33

Registrar's Office Use Only - Program Code:

SC-MS-EVSP

**Registrar/IRR Use
Only – Program CIP
Code**

**Admission
Requirements:**

Admissions

University-wide admissions policies can be found in [the Graduate Admissions Policies section of this catalog](#). : ~~International~~ Additionally, information on the admission of international students ~~and students having earned international degrees should also refer to~~ can be found in [Admission of International International Students for additional requirements](#).

~~To apply for this program, please complete the George Mason University Admissions Application.~~ Eligibility

Applicants should hold a bachelor's degree from an institution of higher education accredited by a Mason-recognized U.S. institutional accrediting agency or international equivalent with a GPA of 3.00 in natural or Earth sciences, engineering, resource planning, environmental studies, or a field that leads to an environmental focus. Applicants should have taken at least two semesters of chemistry and three semesters of biology, including a course in ecology. Applicants who lack this coursework should contact the [ESP Graduate Office](#) ~~graduate coordinator's office~~ for advice (espgrad@gmu.edu). Successful completion of a two-semester sequence of introductory graduate-level environmental chemistry and biology courses can be used to satisfy the biology and chemistry prerequisites for admission. These introductory courses would be in addition to the requirements for the degree.

Application Requirements

~~To apply for this program, prospective students should submit~~ ~~please complete~~ [the George Mason University Admissions Application and its required supplemental documentation, and: Application:](#)

- ~~Application Requirements Applicants should submit the following: Completed George Mason University George Mason University Admissions Application.~~ Three letters of recommendation, including at least one from a former professor or, if not available, from someone with a PhD.
- ~~The GRE is required.~~ Statement of interest indicating: Desired concentration, potential areas of environmental focus/research interest, interactions with potential faculty advisors, and career goals.
- Contact a potential George Mason faculty advisor (appropriate for research interests). ~~The An endorsement letter from the potential advisor must be sent to the Department of Environmental Science and Policy's graduate office; the~~ availability of an advisor in the student's area of interest is a prerequisite for admission. [The advisor will provide a completed Prospective Advisor Form to be included in the admissions application. More details can be found here.](#)

The GRE is not required for admission into this program.

Program-Specific
Policies:

Policies

For policies governing all graduate programs, see [AP.6 Graduate Policies](#).

Transferring Previous Graduate Credit into this Program

Previously earned and relevant graduate credits may be eligible for transfer into this program; details can be found in the Credit by Exam or Transfer section of this catalog.

Course Selections

Some program requirements may be fulfilled by completing courses from a variety of academic units at Mason. A student's course selections should reflect a coherent individual program focus, which is stated and briefly described in the program of study. Course selections should also support the research component of the student's degree program (if applicable) and should be developed in close consultation with the supervisory committee. The supervisory committee approves a coursework program (the program of study) individually for each student. In special cases, the graduate program director may permit the substitution of an alternative course in place of a required one.

Supervisory Committee

Students must form a supervisory committee and submit a program of study to the [ESP Graduate Office](#) (espgrad@gmu.edu) ~~graduate coordinator~~ for approval within the first 9 credits of coursework or by the end of the second semester, whichever comes first.

The supervisory committee consists of the advisor and at least two other members, chosen in consultation with the advisor, and must conform to [AP.6.9 Requirements for Master's Degrees](#).

Degree Requirements:

This is a Green Leaf program.

Students should refer to [Admissions & Policies](#) for specific policies related to this program.

Students in all of the concentrations must will complete the Core Courses, Research Requirement, concentration requirements, concentration's requirements and elective credits (as needed) for the research requirement with a total of minimum of 33 credits.

Students may ~~elect~~ select for their degree to culminate in either a research project (3 credits) or a thesis (3-6 credits). The concentration credit amount requirements below are directly related to the ~~this~~ selection of either a research project or a thesis.

Core Courses

Science Courses

Select 3 credits from the following:

3

EVPP 518	Conservation Biology
EVPP 607	Fundamentals of Ecology
EVPP 648	Population Ecology

Statistics Courses

Select 3 credits from the following:

3

EVPP 585	Quantitative Data Analysis for Environmental Scientists
EVPP 632	Qualitative Research Methods for Environmental Scientists
EVPP 651	Multivariate Data Analysis for Ecology and Environmental Science
CONS 560	Statistics and Study Design in Ecology and Conservation
CONS 625	Generalized Linear and Mixed Models in Ecology and Conservation Biology
GCH 604	Fundamentals of Epidemiology and Biostatistics
POGO 511	Introductory Data Analysis for Policy and Government
SOCL 620	Methods and Logic of Social Inquiry
STAT 554	Applied Statistics I

Policy Courses

Select 3 credits from the following:

3

EVPP 524	Introduction to Environmental and Resource Economics
EVPP 608	Introduction to Environmental Social Science
EVPP 635	Environment and Society
EVPP 642	Environmental Policy

Science and Policy Courses

Select 3 credits from the following:

3

EVPP 530	Evidence-Based Environmental Policymaking
EVPP 670	Environmental Law

Seminar Courses

[Select 3 credits from the following:](#)

3

EVPP 692	Master's Seminar in Environmental Science and Public Policy
EVPP 991	Advanced Seminar in Environmental Science

Research Requirement

3=

6

~~The research requirement may be satisfied in one of two ways: A research project or a formal thesis. The depth and sophistication of the research differs between the two options. The thesis normally involves original research with independent acquisition and interpretation of data, with the goal of peer-reviewed publication. Projects are generally less extensive and can include a broader range of activities. Choose from one of the following:~~

~~Research Project Option~~

~~Students fulfilling the research requirement with the project option register for EVPP 798 Master's Research Project in Environmental Science and Public Policy and are required to take a comprehensive examination covering knowledge mastered throughout the program of study. This examination includes both a written and an oral component and is administered by the student's supervisory committee.~~

~~EVPP 798 Master's Research Project in Environmental Science and Public Policy (3 credits)~~

~~Thesis Option~~

~~Students fulfilling the research requirement with the thesis option register for EVPP 799 Master's Thesis in Environmental Science and Public Policy, present their results in a public seminar, and defend their thesis before their supervisory committee. Students will be graded "Satisfactory/No Credit" on the research requirement.~~

~~EVPP 799 Master's Thesis in Environmental Science and Public Policy (3-6 credits)~~

~~Electives~~

~~If necessary, students must take additional electives or concentration courses to bring the degree total to 33 credits. These courses must be approved by the student's supervisory committee and outlined on the student's program of study.~~

Total Credits

15

Research Requirement

The research requirement may be satisfied in one of two ways: A research project or a formal thesis. The depth and sophistication of the research differs between the two options. The thesis normally involves original research with independent acquisition and interpretation of data, with the goal of peer-reviewed publication. Projects are generally less extensive and can include a broader range of activities.

~~Core Courses~~

Select one of the following options:

3-
6

Research Project Option

Students fulfilling the research requirement with the project option register for EVPP 798 Master's Research Project in Environmental Science and Public Policy and are required to take a comprehensive examination covering knowledge mastered throughout the program of study. This examination includes both a written and an oral component and is administered by the student's supervisory committee. Project written product and public presentation of the project may be substituted for oral and written examinations at the discretion of the student's advisor and committee members. Students will be graded "Satisfactory/No Credit" on the project research requirement.

EVPP 798 Master's Research Project in Environmental Science and Public Policy (3 credits)

Thesis Option

Students fulfilling the research requirement with the thesis option register for EVPP 799 Master's Thesis in Environmental Science and Public Policy, present their results in a public seminar, and defend their thesis before their supervisory committee. Students will be graded "Satisfactory/No Credit" on the thesis research requirement.

EVPP 799 Master's Thesis in Environmental Science and Public Policy (3-6 credits)

Total Credits

3-
6

~~Students in all of the concentrations will complete the concentration's requirements and the research requirement with a minimum of 33 credits.~~ **Aquatic Ecology Concentration (AQEC)**

This concentration will provide students with a well-grounded master's in the study of aquatic environments such as lakes, streams, watersheds, and estuaries. Emphasis is placed on food webs, biogeochemical cycles, water quality, habitat characteristics, and life histories of aquatic organisms. Students will become proficient with research tools including literature review, field and laboratory methods, and analytical tools as well as applications to management issues.

Aquatic Science

Required Courses

<u>EVPP 550</u>	Waterscape Ecology and Management	3
<u>EVPP 581</u>	Estuarine and Coastal Ecology	3
Choose 3-6 credits from the following:		3-6
<u>Select 3-6 credits from the following: 1</u>		<u>3-6</u>
<u>EVPP 519</u>	Marine Mammal Biology and Conservation	
<u>EVPP 521</u>	Marine Conservation	
<u>EVPP 536</u>	The Diversity of Fishes	
<u>EVPP 545</u>	Principles of Environmental Toxicology	
<u>EVPP 549</u>	Marine Ecology	
<u>EVPP 563</u>	Coastal Morphology and Processes	
<u>EVPP 566</u>	<u>Coral Reef Ecology, Health, and Conservation</u>	
<u>EVPP 608</u>	Introduction to Environmental Social Science	
<u>EVPP 619</u>	The Challenge of Biodiversity	
<u>EVPP 623</u>	Translating Environmental Policy into Action	
<u>EVPP 635</u>	Environment and Society	
<u>EVPP 641</u>	Environmental Science and Public Policy	
<u>EVPP 642</u>	Environmental Policy	
<u>EVPP 643</u>	Microbial Ecology	
<u>EVPP 646</u>	Wetland Ecology and Management	
<u>EVPP 648</u>	Population Ecology	
<u>CLIM 512</u>	Physical Oceanography	
Choose 3 credits from the following:		3
<u>Select 3 credits from the following: 1</u>		<u>3</u>
<u>EVPP 515</u>	Molecular Environmental Biology I	
<u>EVPP 555</u>	Lab in Waterscape Ecology	
<u>EVPP 567</u>	<u>Coral Reef Ecology, Health, and Conservation Lab/Field Experience</u>	
<u>EVPP 582</u>	Estuarine and Coastal Ecology Laboratory	
<u>EVPP 615</u>	Molecular Environmental Biology II	
<u>EVPP 647</u>	Wetland Ecology Lab and Field	
<u>EVPP 651</u>	Multivariate Data Analysis for Ecology and Environmental Science	
<u>GGG 653</u>	GIS Analysis and Application	
<u>STAT 554</u>	Applied Statistics I	
Total Credits		12-15

1

Credits must be unique to this concentration and are not permitted to share with other core requirements in this degree.

Conservation Science and Policy Concentration (COSP)

This concentration is designed to foster an interdisciplinary, research-oriented degree focusing on the conservation of threatened species and habitats, integrating biological sciences and the human dimensions of conservation practice. Students may take courses offered by the [Department of Environmental Science and Policy](#) and other departments, including CONS courses which are offered through the [Smithsonian Mason School of Conservation](#). This unique partnership with the Smithsonian-Mason School of Conservation (SMSC) in Front Royal, Virginia offers students hands-on education in cutting-edge conservation science and human dimensions through residential, intensive classes. SMSC is renowned for its conservation research and training of conservation practitioners around the world and instructors for these classes are drawn from SMSC's conservation scientists and other experts from around the world.

Required Courses

[EVPP 637](#) Human Dimensions of Climate Change 3

~~Choose 3 credits from the following:~~ 3

Select 3 credits from the following: 1 3

[EVPP 518](#) Conservation Biology

[EVPP 619](#) The Challenge of Biodiversity

[EVPP 621](#) Overview of Biodiversity Conservation

~~Choose 3 credits from the following:~~ 3

Select 3 credits from the following: 1 3

[EVPP 529](#) Environmental Science Communication

[EVPP 530](#) Evidence-Based Environmental Policymaking

~~Choose 3-6 credits from the following:~~ 3-6

Select 3-6 credits from the following: 1 3-6

[EVPP 515](#) Molecular Environmental Biology I

[EVPP 527](#) Conservation Medicine

[EVPP 560](#) Infectious Diseases of Wildlife

[EVPP 607](#) Fundamentals of Ecology

[EVPP 615](#) Molecular Environmental Biology II

[EVPP 620](#) Development of U.S. Environmental Policies

[EVPP 623](#) Translating Environmental Policy into Action

[EVPP 648](#) Population Ecology

[GGS 553](#) Geographic Information Systems

Total Credits 12-15

1

Credits must be unique to this concentration and are not permitted to share with other core requirements in this degree.

Environmental Science and Policy Concentration (EVSP)

The Environmental Science and Policy concentration is the largest within the master's and serves as a home for a broad array of research foci. It encourages an independent and creative approach to the development of curricula that reside in the general field of environmental science and policy.

Choose at least 3 credits from the following: **3**

Required Courses

Select at least 3 credits from the following: 1 **3**

EVPP 527 Conservation Medicine

EVPP 532 Animal Behavior

EVPP 543 Tropical Ecosystems

EVPP 648 Population Ecology

Choose at least 3 credits from the following: **3**

Select at least 3 credits from the following: 1 **3**

EVPP 531 Land-use Modeling Techniques and Applications

EVPP 650 Ecosystem Analysis and Modeling

STAT 525 Nonparametric Statistics and Categorical Data Analysis

STAT 535 Analysis of Experimental Data

Choose 6-9 credits from the following: **6-9**

Select 6-9 credits from the following: 1 **6-9**

EVPP 521 Marine Conservation

EVPP 533 Energy Policy

EVPP 542 Urban Ecosystems Processes

EVPP 550 Waterscape Ecology and Management

EVPP 560 Infectious Diseases of Wildlife

EVPP 619 The Challenge of Biodiversity

EVPP 622 Management of Wild Living Resources

EVPP 623 Translating Environmental Policy into Action

EVPP 641 Environmental Science and Public Policy

EVPP 677 Applied Ecology and Ecosystem Management

Total Credits **12-15**

1

Credits must be unique to this concentration and are not permitted to share with other core requirements in this degree.

Communication for Environmental Science, Policy, and Human Behavior (CESP)

The ability to communicate underlies all successful human cooperation. With the growth of anthropogenic global threats such as biodiversity loss and climate change, communication that supports environmental knowledge formation, policy, and behavior change is needed more than ever. Two courses in the concentration from the department, supplemented by those across the university, will allow students to focus on one of these topics. Other classes aside from the core courses may be substituted as needed.

Required Courses

EVPP 529	Environmental Science Communication	3
EVPP 530	Evidence-Based Environmental Policymaking	3
Choose 3-6 credits from one of the following groupings:		3-6
<u>Select 3-6 credits from one of the following groupings: 1</u>		<u>3-6</u>

Policy and Governance Grouping[EVPP 575](#) Global Biodiversity Governance[COMM 637](#) Risk Communication[GOVT 510](#) American Government and Politics[PUAD 540](#) Public Policy Process

Behavior Change Grouping

[COMM 637](#) Risk Communication[COMM 660](#) Climate Change and Sustainability Communication Campaigns[COMM 670](#) Social Marketing[COMM 706](#) Strategic Communication

Science in Society Grouping

[COMM 602](#) Theories and Research of Mass Communication[COMM 639](#) Science Communication[COMM 642](#) Science and the Public[COMM 735](#) Crisis Communication~~Choose at least 3 credits from the following:~~ 3Select at least 3 credits from the following: 1 3[GGS 553](#) Geographic Information Systems[GGS 681](#) Social Media Analysis[COMM 650](#) Intro to Research Methods in Communication[COMM 775](#) Media Content Analysis[EDRS 811](#) Quantitative Methods in Educational Research[EDRS 827](#) Introduction to Measurement and Survey Development[POGO 511](#) Introductory Data Analysis for Policy and Government[POGO 646](#) Policy and Program Evaluation[PSYC 557](#) Psychometric Methods[PUBP 704](#) Statistical Methods in Policy Analysis[SOCI 620](#) Methods and Logic of Social Inquiry[SOCI 631](#) Survey Research

Total Credits 12-15

1Credits must be unique to this concentration and are not permitted to share with other core requirements in this degree.

Environment and Management Concentration (EVM)

This concentration combines the managerial and administrative skills developed in a traditional master of public administration degree program with the scientific knowledge and understanding normally found in a master of

science degree. It is especially meant for individuals working in or aspiring to work as managers in the environmental field in government or private industry. -

Required Courses

EVPP 641 Environmental Science and Public Policy 3

EVPP 677 Applied Ecology and Ecosystem Management 3

~~Choose 3 credits from the following:~~ 3

Select 3 credits from the following: 1 3

EVPP 638 Corporate Environmental Management and Policy

PUAD 502 Administration in Public and Nonprofit Organizations

~~Choose 3-6 credits from the following:~~ 3-6

Select 3-6 credits from the following: 1 3-6

EVPP 524 Introduction to Environmental and Resource Economics

EVPP 525 Economics of Human/Environment Interactions

EVPP 529 Environmental Science Communication

EVPP 530 Evidence-Based Environmental Policymaking

EVPP 533 Energy Policy

EVPP 542 Urban Ecosystems Processes

EVPP 545 Principles of Environmental Toxicology

EVPP 550 Waterscape Ecology and Management

EVPP 560 Infectious Diseases of Wildlife

EVPP 620 Development of U.S. Environmental Policies

EVPP 646 Wetland Ecology and Management

GG5 553 Geographic Information Systems

Total Credits 12-15

1

Credits must be unique to this concentration and are not permitted to share with other core requirements in this degree.

Energy and Sustainability Policy and Science (ESPS)

Many mid-level energy and sustainability positions in the public and private sectors require multidisciplinary grounding in science, policy, and methods. To provide such a foundation, this concentration combines the scientific knowledge normally acquired through a Master of Science degree with development of relevant policy and methods skills.

Required Courses

EVPP 533 Energy Policy 3

~~Choose one from the following:~~ 3

Select 3 credits from the following: 1 3

EVPP 534 Food-Energy-Water Nexus

GG5 507 Geographic Approaches for Sustainable Development

Science

~~Choose one from the following:~~ 3

Select 3 credits from the following: 13

- [EVPP 542](#) Urban Ecosystems Processes
- [EVPP 677](#) Applied Ecology and Ecosystem Management
- [GEOL 521](#) Geology of Energy Resources
- [PHYS 581](#) Topics in Renewable Energy
- [CEIE 501](#) Sustainable Development
- [CEIE 550](#) Environmental Engineering Systems
- [CEIE 634](#) Geoenvironmental Design
- [CEIE 690](#) Topics in Civil Engineering
- [CEIE 742](#) Water Resources Engineering II: Water Resource Systems

~~Policy and Methods Electives~~

Select 1 or 2 courses from the following: 1

3-6

- [EVPP 505](#) Selected Topics in Environmental Science (When the topic is "Energy Law & Regulation," or "Fundamentals of Environmental GIS" ([EVPP 505](#) can be taken twice if these two topics are taken separately))
- [EVPP 534](#) Food-Energy-Water Nexus
- [EVPP 503](#) Field Mapping Techniques
- or [GEOL 553](#) Field Mapping Techniques
- [EVPP 638](#) Corporate Environmental Management and Policy
- [EVPP 650](#) Ecosystem Analysis and Modeling
- [CSS 645](#) Spatial Agent-Based Models of Human-Environment Interactions
- [GGS 507](#) Geographic Approaches for Sustainable Development
- [ECON 695](#) Special Topics in Economics
- [NUTR 608](#) Perspectives on Food Security
- [NUTR 630](#) Global Nutrition

Total Credits

12-

15

1

Credits must be unique to this concentration and are not permitted to share with other core requirements in this degree.

Conservation Medicine & Planetary Health Concentration (CMPH)

Conservation Medicine and Planetary Health (CMPH) are emerging disciplines that address complex health problems that follow disturbances to the Earth's natural systems requiring transdisciplinary collaborations, systems thinking, and adaptive management approaches to health and ecology. Conservation Medicine evolved from the singular key principle that *health connects all species in the planet*. Planetary Health is focused on characterizing the human health impacts of anthropogenic disruptions of Earth's natural systems. The CMPH concentration will provide training in quantitative and qualitative research methods and expand the student's ability to think outside of the box and work beyond traditional disciplinary silos to address complex health issues rooted in ecological principles.

Required Courses

- [EVPP 527](#) Conservation Medicine 3

EVPP 528	Planetary Health	3
EVPP 677	Applied Ecology and Ecosystem Management	3
Elective Courses		3-6
Choose 3-6 credits from the following:		
<u>Select 3-6 credits from the following: 1</u>		<u>3-6</u>
EVPP 525	Economics of Human/Environment Interactions	
EVPP 528	Planetary Health	
EVPP 529	Environmental Science Communication	
EVPP 542	Urban Ecosystems Processes	
EVPP 545	Principles of Environmental Toxicology	
EVPP 560	Infectious Diseases of Wildlife	
EVPP 575	Global Biodiversity Governance	
EVPP 610	Bioremediation: Theory and Applications	
EVPP 637	Human Dimensions of Climate Change	
EVPP 642	Environmental Policy	
EVPP 651	Multivariate Data Analysis for Ecology and Environmental Science	
CLIM 690	Scientific Basis of Climate Change	
GGS 540	Health Geography	
BIOD 609	Biodefense Strategy	
COMM 735	Crisis Communication	
GCH 543	Global Health	
GCH 604	Fundamentals of Epidemiology and Biostatistics	
NUTR 630	Global Nutrition	
PUAD 630	Emergency Planning and Preparedness	
Total Credits		12-15

1

Credits must be unique to this concentration and are not permitted to share with other core requirements in this degree.

Electives

If necessary, students must take additional electives or concentration courses to bring the degree total to 33 credits. These courses must be approved by the student's supervisory committee and outlined on the student's program of study.

Total Credits 0-3

**Retroactive
Requirements
Updates:**

Plan of Study:

Program Outcomes

Additional Program Information

This information is required by the Office of Accreditation and Program Integrity.

Courses offered via distance (if applicable):

What is the primary delivery format for the program?
Face-to-Face Only

Does any portion of this program occur off-campus?

No

Are you working with a vendor / other collaborators to offer your program?

No

Related Departments

Could this program prepare students for any type of professional licensure, in Virginia or elsewhere?

No

Are you adding or removing a licensure component?

No

Additional SCHEV & SACSCOC Information

Is this change a simple retitling of an existing program, with no other changes, to any existing program content, curriculum requirements, etc?

No

Does this change represent a repackaging of content in an existing approved degree/certificate program at the same instructional level (i.e., baccalaureate, master's, or doctoral)?

No

Percentage of total credits containing new course content. ("New course content" is defined by SACSCOC as content that is not currently included in an existing approved degree/certificate program at the same instructional level. Do not exclude gen ed credits in calculations for undergraduate programs.)

0%-24%

Does this change include the addition of a distance education or face-to-face method of delivery for this program?

No

Does this change include the addition of a course/credit-based competency-based education delivery option?

No

Will any additional equipment/facilities be needed?

No

Will any additional faculty be required?

No

Will any additional financial resources be needed?

No

Additional library/learning resources needed?

No

OAPI Use Only – Determination of SACSCOC Impact

Comments or Notes

Green Leaf Program Designation

Is this a Green Leaf program? Yes

Green Leaf Designation Sustainability-focused designation

Sustainability-focused academic programs require at least one green leaf course. Either that course is itself sustainability-focused or else the program requires a set of sustainability-related courses with aggregated substance equivalent to a sustainability-focused course.

Relationship to Existing Courses

Relationship to Existing Programs

**List sustainability-
focused courses
currently required
in the degree
program:**

Does this program cover material which crosses into another department?

No

**Additional
Attachments**

SCHEV Proposal

Executive Summary

**Reviewer
Comments**

**Additional
Comments**

Is this course required of all students in this degree program?

%wi_required.eshtml%

Key: 189