# **Program Change Request**

Date Submitted: 11/08/24 12:35 pm

# Viewing: SC-MS-EVSP : Environmental Science and

# Policy, MS

Last approved: 05/21/24 12:58 pm

## Last edit: 02/18/25 1:43 pm

Changes proposed by: jbazaz

Catalog Pages Using this Program Environmental Science and Policy, MS

Anticinated (

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

Yes

**Requestor:** 

## 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. 02/27/25 12:00 pm Esther Peters (epeters2): Approved for ESP GR Committee
- 2. 02/27/25 12:08 pm Gad Perry (gperry23): 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

- 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)
- 18. Apr 26, 2024 by Jennifer Bazaz Gettys (jbazaz)
- 19. May 21, 2024 by Tory Sarro (vsarro)

Nan	ne	Extension	Email
Esther Peters		5302	epeters2
Effective Catalog:	2024-2025		
Program Level:	Graduate		

0/17/20, 12.00			Inal Science and Policy, NS
Program	n Type:	Master's	
Degree	Туре:	Master of Science	
Title:		Environmental Science and Policy, MS	
E la da:			
Banner	Title:	MS Environmental Sci & Policy	
Registra Only – S Status	ar/OAPI Use SCHEV	Approved	
Registra Use On Prograr	ar's Office ly – n Start Term		
Registra Only – S Letter	ar/OAPI Use SCHEV		
Registra Only – S Status	ar/OAPI Use SACSCOC		
Concen	tration(s):		
		Associated Concentrations	Registrar's Office Use Only: Concentration Code
1	Aquatic Ecol	ogy	AQEC
2	Conservatior	Science and Policy	COSP
3	Environment	al Science and Policy	EVSP
4	Communicat Human Beha	ion for Environmental Science, Policy, and wior	CESP
5	Environment	and Management	EVM

ESPS

CMPH

Energy and Sustainability Policy and Science

Conservation Medicine & Planetary Health

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SC-MS-EVSP	Environmental	Science	and I	Policy,	MS
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Registrar/IRR Use Only – Concentration CIP Code	
College/School:	College of Science
Department / Academic Unit:	Environmental Science & Policy
Jointly Owned Program?	No

#### Justification

What: Making retroactive previous changes to allow for any topic of EVPP 991 to count toward the Seminar Courses requirement.

Why: When the earlier program changes were made, we did not provide retroactive catalog dates, leading to lingering issues with degree audits.

What: Inclusion of Protists Diversity and Ecology (currently EVPP 505) as an elective for the 1) Aquatic Ecology, 2) Environmental Science and Policy, and 3) Environment and Management concentrations.

Why: The course provides students with an understanding of the diversity and ecology of protists (algae and protozoa), which are important primary producers and consumers in freshwater and marine ecosystems. Students can apply the concepts to their chosen dissertation or research projects in the areas of aquatic ecology and water quality protection.

What: Inclusion of Diversity of Fishes (EVPP 536) as an elective for the 1) Environmental Science and Policy Concentration and 2) Environment and Management concentrations. Why: Fishes represent one of the most managed natural resources in the country (and the world). Therefore, anyone pursuing a concentration in environmental management should be well versed in fishes. Furthermore, they represent the terminal taxa in many aquatic food webs, providing insight into the function of various ecosystems. For anyone pursuing the Environmental Science and Policy concentration that plans to work in any sector with an aquatic component, having a robust knowledge of fishes is vital. To have our broadest "build your own" concentration not include fishes as an approved elective is a disservice to our students who may interact with aquatic ecosystems but want to have a broader lens than the aquatic ecology concentration.

Total Credits Total credits: 33 Required:

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 <u>Graduate Admissions Policies</u> section of this catalog. International students and students having earned international degrees should also refer to <u>Admission of</u> <u>International Students</u> for additional requirements.

# 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 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 the <u>George Mason University Admissions</u> <u>Application</u> and its required supplemental documentation, and:

- Three letters of recommendation, including at least one from a former professor or, if not available, from someone with a PhD.
- 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 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 <u>here</u>.
   The GRE is not required for admission into this program.

Program-Specific Policies:

# Policies

For policies governing all graduate programs, see <u>AP.6 Graduate Policies</u>.

## **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 <u>Credit by Exam or Transfer</u> 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) 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 <u>AP.6.9 Requirements for Master's Degrees</u>.

## Degree

#### **Requirements:**

This is a Green Leaf program.

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

Students in all concentrations must complete the Core Courses, Research Requirement, concentration requirements, and elective credits (as needed) for a total of 33 credits.

Students may elect 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 selection of either a research project or a thesis.

## **Core Courses**

Science Courses		
Select 3 credits fro	om the following:	3
<u>EVPP 518</u>	Conservation Biology	
<u>EVPP 607</u>	Fundamentals of Ecology	
<u>EVPP 648</u>	Population Ecology	
Statistics Courses		
Select 3 credits fro	om the following:	3
<u>EVPP 585</u>	Quantitative Data Analysis for Environmental Scientists	
EVPP 632	Qualitative Research Methods for Environmental Scientists	

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EVPP 651	Multivariate Data Analysis for Ecology and Environmental Science	
<u>CONS 560</u>	Statistics and Study Design in Ecology and Conservation	
<u>CONS 625</u>	Generalized Linear and Mixed Models in Ecology and Conservation Biology	
<u>GCH 604</u>	Fundamentals of Epidemiology and Biostatistics	
<u>POGO 511</u>	Introductory Data Analysis for Policy and Government	
<u>SOCI 620</u>	Methods and Logic of Social Inquiry	
<u>STAT 554</u>	Applied Statistics I	
Policy Courses		
Select 3 credits fro	om the following:	3
<u>EVPP 635</u>	Environment and Society	
<u>EVPP 642</u>	Environmental Policy	
Science and Policy	v Courses	
Select 3 credits fro	om the following:	3
<u>EVPP 530</u>	Evidence-Based Environmental Policymaking	
<u>EVPP 670</u>	Environmental Law	
Seminar Courses		
Select 3 credits fro	om the following:	3
<u>EVPP 692</u>	Master's Seminar in Environmental Science and Public Policy	
<u>EVPP 991</u>	Advanced Seminar in Environmental Science	
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.

Select one of the following options:

#### **Research Project Option**

Students fulfilling the research requirement with the project option register for <u>EVPP 798</u> Master's Research Project in Environmental Science and Public Policy and are required to take a comprehensive examination

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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.

<u>EVPP 798</u>	Master's Research Project in Environmental Science and Public Policy (3 credits)
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#### **Thesis Option**

Students fulfilling the research requirement with the thesis option register for <u>EVPP 799</u> 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)
	Master 5 mesis in Environmental science and rubic roney (5 o creates)

**Total Credits** 

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# **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

<b>Required Courses</b>		
<u>EVPP 550</u>	Waterscape Ecology and Management	3
<u>EVPP 581</u>	Estuarine and Coastal Ecology	3
Select 3-6 credits from	n the following: <sup>1</sup>	3-6
<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>	Coral Reef Ecology, Health, and Conservation	

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<u>EVPP 608</u>	Introduction to Environmental Social Science
EVPP 619	The Challenge of Biodiversity
EVPP 623	Translating Environmental Policy into Action
EVPP 635	Environment and Society
<u>EVPP 641</u>	Environmental Science and Public Policy
EVPP 642	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

Select 3 credits from the following: <sup>1</sup>

<u>EVPP 505</u>	<u>Selected Topics in Environmental Science (when the topic is "Protists Diversity</u> and Ecology")	
EVPP 515	Molecular Environmental Biology I	
<u>EVPP 555</u>	Lab in Waterscape Ecology	
<u>EVPP 567</u>	Coral Reef Ecology, Health, and Conservation Lab/Field Experience	
<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>GGS 653</u>	GIS Analysis and Application	
<u>STAT 554</u>	Applied Statistics I	
Total Credits		12-

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.

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Students may take courses offered by the <u>Department of Environmental Science and Policy</u> and other departments, including CONS courses which are offered through the <u>Smithsonian Mason School of Conservation</u>. 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.

<b>Required Courses</b>		
<u>EVPP 637</u>	Human Dimensions of Climate Change	3
Select 3 credits from the following: <sup>1</sup>		3
<u>EVPP 518</u>	Conservation Biology	
<u>EVPP 619</u>	The Challenge of Biodiversity	
<u>EVPP 621</u>	Overview of Biodiversity Conservation	
Select 3 credits from	the following: <sup>1</sup>	3
<u>EVPP 529</u>	Environmental Science Communication	
<u>EVPP 530</u>	Evidence-Based Environmental Policymaking	
Select 3-6 credits fro	om the following: <sup>1</sup>	3-6
<u>EVPP 515</u>	Molecular Environmental Biology I	
<u>EVPP 527</u>	Conservation Medicine	
<u>EVPP 560</u>	Infectious Diseases of Wildlife	
<u>EVPP 607</u>	Fundamentals of Ecology	
<u>EVPP 615</u>	Molecular Environmental Biology II	
<u>EVPP 620</u>	Development of U.S. Environmental Policies	
<u>EVPP 623</u>	Translating Environmental Policy into Action	
<u>EVPP 648</u>	Population Ecology	
<u>GGS 553</u>	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.

<b>Required Courses</b>		
Select at least 3 credits from the following: <sup>1</sup>		3
<u>EVPP 527</u>	Conservation Medicine	
<u>EVPP 532</u>	Animal Behavior	
<u>EVPP 543</u>	Tropical Ecosystems	
<u>EVPP 648</u>	Population Ecology	
Select at least 3 cred	its from the following: <sup>1</sup>	3
<u>EVPP 531</u>	Land-use Modeling Techniques and Applications	
<u>EVPP 650</u>	Ecosystem Analysis and Modeling	
<u>STAT 525</u>	Nonparametric Statistics and Categorical Data Analysis	
<u>STAT 535</u>	Analysis of Experimental Data	
Select 6-9 credits fro	m the following: <sup>1</sup>	6-9
<u>EVPP 505</u>	<u>Selected Topics in Environmental Science (when the topic is "Protists Diversity</u> and Ecology")	
<u>EVPP 521</u>	Marine Conservation	
<u>EVPP 533</u>	Energy Policy	
<u>EVPP 536</u>	The Diversity of Fishes	
<u>EVPP 542</u>	Urban Ecosystems Processes	
<u>EVPP 550</u>	Waterscape Ecology and Management	
<u>EVPP 560</u>	Infectious Diseases of Wildlife	
<u>EVPP 619</u>	The Challenge of Biodiversity	
<u>EVPP 622</u>	Management of Wild Living Resources	
<u>EVPP 623</u>	Translating Environmental Policy into Action	
<u>EVPP 641</u>	Environmental Science and Public Policy	
<u>EVPP 677</u>	Applied Ecology and Ecosystem Management	
Total Credits		12- 15

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.

<b>Required Courses</b>		
<u>EVPP 529</u>	Environmental Science Communication	3
<u>EVPP 530</u>	Evidence-Based Environmental Policymaking	3
Select 3-6 credits from	n one of the following groupings: <sup>1</sup>	3-6
Policy and Governa	ance Grouping	
<u>EVPP 575</u>	Global Biodiversity Governance	
<u>COMM 637</u>	Risk Communication	
<u>GOVT 510</u>	American Government and Politics	
<u>PUAD 540</u>	Public Policy Process	
Behavior Change G	Grouping	
<u>COMM 637</u>	Risk Communication	
<u>COMM 660</u>	Climate Change and Sustainability Communication Campaigns	
<u>COMM 670</u>	Social Marketing	
<u>COMM 706</u>	Strategic Communication	
Science in Society	Grouping	
<u>COMM 602</u>	Theories and Research of Mass Communication	
<u>COMM 639</u>	Science Communication	
<u>COMM 642</u>	Science and the Public	
<u>COMM 735</u>	Crisis Communication	
Select at least 3 credits from the following: <sup>1</sup>		3
<u>GGS 553</u>	Geographic Information Systems	

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<u>GGS 681</u>	Social Media Analysis
<u>COMM 650</u>	Intro to Research Methods in Communication
<u>COMM 775</u>	Media Content Analysis
EDRS 811	Quantitative Methods in Educational Research
EDRS 827	Introduction to Measurement and Survey Development
<u>POGO 511</u>	Introductory Data Analysis for Policy and Government
<u>POGO 646</u>	Policy and Program Evaluation
<u>PSYC 557</u>	Psychometric Methods
<u>PUBP 704</u>	Statistical Methods in Policy Analysis
<u>SOCI 620</u>	Methods and Logic of Social Inquiry
<u>SOCI 631</u>	Survey Research

**Total Credits** 

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1

Credits 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		
<u>EVPP 641</u>	Environmental Science and Public Policy	3
<u>EVPP 677</u>	Applied Ecology and Ecosystem Management	3
Select 3 credits from	the following: <sup>1</sup>	3
<u>EVPP 638</u>	Corporate Environmental Management and Policy	
<u>PUAD 502</u>	Administration in Public and Nonprofit Organizations	
Select 3-6 credits from the following: <sup>1</sup>		3-6
<u>EVPP 505</u>	<u>Selected Topics in Environmental Science (when the topic is "Protists Diversity and Ecology")</u>	
<u>EVPP 524</u>	Introduction to Environmental and Resource Economics	
<u>EVPP 529</u>	Environmental Science Communication	

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<u>EVPP 530</u>	Evidence-Based Environmental Policymaking	
<u>EVPP 533</u>	Energy Policy	
<u>EVPP 536</u>	The Diversity of Fishes	
<u>EVPP 542</u>	Urban Ecosystems Processes	
<u>EVPP 545</u>	Principles of Environmental Toxicology	
<u>EVPP 550</u>	Waterscape Ecology and Management	
<u>EVPP 560</u>	Infectious Diseases of Wildlife	
<u>EVPP 620</u>	Development of U.S. Environmental Policies	
<u>EVPP 646</u>	Wetland Ecology and Management	
<u>GGS 553</u>	Geographic Information Systems	
Total Credits		12-

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		
<u>EVPP 533</u>	Energy Policy	3
Select 3 credits from	the following: <sup>1</sup>	3
<u>EVPP 534</u>	Food-Energy-Water Nexus	
<u>GGS 507</u>	Geographic Approaches for Sustainable Development	
Select 3 credits from	the following: <sup>1</sup>	3
<u>EVPP 542</u>	Urban Ecosystems Processes	
<u>EVPP 677</u>	Applied Ecology and Ecosystem Management	
<u>GEOL 521</u>	Geology of Energy Resources	
<u>PHYS 581</u>	Topics in Renewable Energy	
<u>CEIE 501</u>	Sustainable Development	

https://workingcatalog.gmu.edu/courseleaf/approve/?role=SC Curriculum Committee

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<u>CEIE 550</u>	Environmental Engineering Systems	
<u>CEIE 634</u>	Geoenvironmental Design	
<u>CEIE 690</u>	Topics in Civil Engineering	
<u>CEIE 742</u>	Water Resources Engineering II: Water Resource Systems	
Select 1 or 2 courses f	from the following: <sup>1</sup>	3-6
<u>EVPP 505</u>	Selected Topics in Environmental Science (When the topic is "Energy Law & Regulation," or "Fundamentals of Environmental GIS" ( <u>EVPP 505</u> can be taken twice if these two topics are taken separately))	
<u>EVPP 534</u>	Food-Energy-Water Nexus	
<u>EVPP 503</u>	Field Mapping Techniques	
or <u>GEOL 553</u>	Field Mapping Techniques	
<u>EVPP 638</u>	Corporate Environmental Management and Policy	
<u>EVPP 650</u>	Ecosystem Analysis and Modeling	
<u>CSS 645</u>	Spatial Agent-Based Models of Human-Environment Interactions	
<u>GGS 507</u>	Geographic Approaches for Sustainable Development	
<u>ECON 695</u>	Special Topics in Economics	
<u>NUTR 608</u>	Perspectives on Food Security	
<u>NUTR 630</u>	Global Nutrition	
Total Credits		12-

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**

<u>EVPP 527</u>	Conservation Medicine	3
<u>EVPP 528</u>	Planetary Health	3
<u>EVPP 677</u>	Applied Ecology and Ecosystem Management	3
Select 3-6 credits from the following: <sup>1</sup>		3-6
<u>EVPP 529</u>	Environmental Science Communication	
<u>EVPP 542</u>	Urban Ecosystems Processes	
<u>EVPP 545</u>	Principles of Environmental Toxicology	
<u>EVPP 560</u>	Infectious Diseases of Wildlife	
<u>EVPP 575</u>	Global Biodiversity Governance	
<u>EVPP 610</u>	Bioremediation: Theory and Applications	
<u>EVPP 637</u>	Human Dimensions of Climate Change	
<u>EVPP 642</u>	Environmental Policy	
<u>EVPP 651</u>	Multivariate Data Analysis for Ecology and Environmental Science	
<u>CLIM 690</u>	Scientific Basis of Climate Change	
<u>GGS 540</u>	Health Geography	
BIOD 609	Biodefense Strategy	
<u>COMM 735</u>	Crisis Communication	
<u>GCH 543</u>	Global Health	
<u>GCH 604</u>	Fundamentals of Epidemiology and Biostatistics	
<u>NUTR 630</u>	Global Nutrition	
<u>PUAD 630</u>	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	0-
33 credits. These courses must be approved by the student's supervisory committee and outlined on the	3
student's program of study.	

#### **Plan of Study:**

Honors Information:

Accelerated Description/Du Degree INTO-Mason Requirements:

College Requirements & Policies: Department / Academic Unit Requirements & 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 instructiona 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

Have you reached out to the Libraries to determine whether there are adequate resources to support your program? If not, please email Meg Meiman, Associate University Librarian for Learning, Research, and Engagement at mmeiman2@gmu.edu.

## **OAPI Use Only – Determination of SACSCOC Impact**

**Comments or Notes** 

# **Green Leaf Program Designation** Is this a Green Leaf Yes program? **Green Leaf** Sustainability-focused designation 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 sustainabilityfocused 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.eschtml%

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

Key: 189