

Program Approval Form

For approval of new programs and deletions or modifications to an existing program.

X Modify Existing (check all that	quired except for minors, certificates one): X Add Delete		Type (Check one): X B.A. B.S. Minor Undergraduate Certificate M.A. M.S. M.Ed. Ph.D. Graduate Certificate Other:	
College/School: College of Science Submitted by: Sven Fuhrmann		Department: Geog	graphy and Geoinformation Science Email: sfuhrman@gmu.edu	
Effective Term: Fall 201 Justification: (attach separate door	7 Please note: For students to program must be fully appro-	be admitted to a new deg	gree, minor, certificate or concentration, the and published in the University Catalog.	
See Attached				
	Existing		New/Modified	
Program Title: (Required) Title must identify subject matter. Do not include name of college/school/dept.	Geography			
Concentration(s): None		Enviro	Environmental Geography	
Admissions Standards / Application Requirements: (Required only if different from those listed in the University Catalog)	None			
Degree Requirements: Consult University Catalog for models, attach separate document if necessary using track changes for modifications	See Attached		See Attached	
Courses offered via distance: (if applicable)				
TOTAL CREDITS REQUIRED:		15 €	16	
ege/School Date Provost's Office Interdisciplinary Council Use Only aboration with another unit at Wasen, the originating department must circulate this proposal atures prior to submission. Failure to as so will delay action on this proposal.				
		Init Approver's Signatur	Date Q 1916	
and Policy (ESP)	TIBN- , IGUIRRE		1/1//-	
For Graduate Programs Only				
Graduate Council Member	Provost Office		Graduate Council Approval Date	
For Registrar Office's Use Only: Receive	dBanner	Catalog	revised 5/5/10	

Proposed Concentration "Environmental Geography" for Geography BA Fall 2017

Currently the Geography BA curriculum does not offer any module or concentration options to students for the 'additional program' requirements other than to complete an outside minor or major. We seek to address this concern by developing new career-centered concentrations as potential degree plan options, while leaving open the ability to complete a minor or 2nd major elsewhere on campus.

The first concentration builds on environmental geography and thus focuses on the physical environment and its effect on humans. Understanding the integration of physical and environmental geography is essential to address current environmental challenges and to develop sustainable solutions. We would submit the BA in Geography with the Environmental Geography Concentration for Green Leaf Status.

Requirements for the Concentration in Environmental Geography

The concentration is developed in close alliance with the Department of Environmental Science and Policy. Both units reviewed the concentration proposal and determined that to complete the concentration, students must complete 15- 1/2 hours of credit, all coursework for the concentration must be unique from other BA requirements, with a minimum GPA of 2.00, consisting of:

Core courses:

1. GGS 303 Geography of Resource Conservation AND

2. EVPP 336 Human Dimensions of the Environment OR EVPP 337 Environmental Policy Making in Developing Countries OR EVPP 377 Applied Ecology

Rationale: Required core courses are designed to provide the essential knowledge and background for careers centered on environmental geography. These courses were chosen as core courses for their ability to provide a broad overview of the field while providing substantive content suited for continued study and career preparation in the field.

One methods course:

2. GGS 354 Data Analysis and Global Change Detection Techniques OR GGS 412 Air Photography Interpretation

Rationale: Required methods courses are designed to provide students with an introduction to more advanced techniques in the analysis of environmental and land surface changes. These methods are essential for environmental geographers.

Select two of the following elective courses: 1. GGS 302 - Global Environmental Hazards

- 2. GGS 307 Sustainable Development
- 3. GGS 309 Meteorology and Climate
- 4. GGS 312 Physical Climatology ろ
- 5. GGS 314 Severe and Extreme Weather
- 6. GGS 319 Air Pollution -37. GGS 322 - Issues in Global Change -3
- 8. GGS 354 Data Analysis and Global Change Detection Techniques (cannot be chosen, if methods course) -3
- 9. GGS 412 Air Photography Interpretation (cannot be chosen, if methods course) -3
- 10. EVPP 336 Human Dimensions of the Environment (cannot be chosen, if core course) $-\frac{1}{3}$
- 11. EVPP 337 Environmental Policy Making in Developing Countries (cannot be chosen, if core course) -2
- 12. EVPP 361 Introduction to Environmental Policy
- 13. EVPP 362 Intermediate Environmental Policy 3

- 14. EVPP 377 Applied Ecology (cannot be chosen, if core course) 3
 15. EVPP 421 Marine Conservation 3
 16. EVPP 440 Field Environmental Science () 4

- 17. EVPP 480 Sustainability in Action 4

Rationale: Elective coursework is designed for the student to tailor remaining credits to their interests in environmental geography. Advance elective coursework is to provide the fundamental knowledge to students in preparation careers in this field.

Approvals:

- Approval from GGS Curriculum Committee on 9/13/2016
- Passed GGS Department Vote on 9/14/2016
- Passed ESP Department Vote on