



**MEMORANDUM**

**To:** Julio Frenk, President

**From:** Linda L. Neider  
Chair, Faculty Senate

A handwritten signature in blue ink, appearing to read 'L. Neider', positioned to the right of the 'From:' field.

**Date:** January 29, 2021

**Subject:** Faculty Senate Legislation #2020-41(B) – Name Change and Curriculum Change for the Bachelor of Science (BS) in Geography TO the BS in Geography and Sustainable Development, College of Arts and Sciences, Department of Geography and Regional Studies

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The Faculty Senate, at its January 27, 2021 meeting, had no objections to the approval of the name change and curriculum change for the Bachelor of Science (BS) in Geography *to* the BS in Geography and Sustainable Development in the College of Arts and Sciences, Department of Geography and Regional Studies. This change will convey modernity and relevance, attract and maintain new students, and become more broadly appealing to current and future undergraduate students.

This legislation is now forwarded to you for your action.

LLN/va/rh

cc: Jeffrey Duerk, Executive Vice President and Provost  
Leonidas Bachas, Dean, College of Arts and Sciences  
José Maria Cardoso da Silva, Professor

**CAPSULE:** Faculty Senate Legislation #2020-41(B) – Name Change and Curriculum Change for the Bachelor of Science (BS) in Geography TO the BS in Geography and Sustainable Development, College of Arts and Sciences, Department of Geography and Regional Studies.

APPROVED:  DATE: 2/17/21  
(President's Signature)

OFFICE OR INDIVIDUAL TO IMPLEMENT: Leonidas Bachas, Dean, College of Arts and Sciences

EFFECTIVE DATE OF LEGISLATION: IMMEDIATELY  
(Pending any further Board of Trustees approval)

NOT APPROVED AND REFERRED TO: \_\_\_\_\_

REMARKS (IF NOT APPROVED): \_\_\_\_\_

# Program Change Request

Date Submitted: 03/09/20 4:24 pm

Viewing: **B.S. in Geography and Sustainable Development : GEOG\_BS,GEOG\_AS\_A**

Last approved: 02/20/20 9:23 am

Last edit: 01/11/21 1:44 pm

Changes proposed by: Diana Ter-Ghazaryan (d.terghazaryan)

Catalog Pages Using  
this Program  
[B.S. in Geography](#)

## In Workflow

1. PG Assessment and Accreditation
2. PG GEG UG Director
3. PG GEG Chair
4. PG AS Assoc Dean
5. PG AS UG Sr Assoc Dean
6. PG AS Dean
7. PG University Accreditation
8. PG FS Office for UCC
9. PG University Curriculum Committee
10. PG University Accreditation
11. PG FS Office for GWC
12. PG FS GWC
13. PG Faculty Senate
14. PG FS Office for President
15. PG Registrar

## Approval Path

1. 03/09/20 3:55 pm  
Jenny Vargas  
(j.zwanziger): Rollback to Initiator
2. 03/20/20 12:12 pm  
Patty Murphy  
(pxm491): Approved for PG Assessment and Accreditation

3. 03/20/20 4:09 pm  
Jose Maria Cardoso da Silva (jxc1446):  
Approved for PG  
GEG UG Director
4. 03/20/20 4:10 pm  
Jose Maria Cardoso da Silva (jxc1446):  
Approved for PG  
GEG Chair
5. 03/27/20 7:12 pm  
Charles Mallery (cmallery):  
Approved for PG AS  
Assoc Dean
6. 05/05/20 1:09 pm  
Jennifer Ferriss-Hill (j.ferrisshill):  
Approved for PG AS  
UG Sr Assoc Dean
7. 09/01/20 6:00 pm  
Leonidas Bachas (l.bachas):  
Approved for PG AS  
Dean
8. 09/22/20 3:17 pm  
Patty Murphy (pxm491): Approved  
for PG University  
Accreditation
9. 09/28/20 11:17 am  
Robyn Hardeman (rhardeman):  
Approved for PG FS  
Office for UCC
10. 10/02/20 9:48 am  
David Chin (dchin1):  
Approved for PG  
University  
Curriculum  
Committee

11. 01/11/21 1:47 pm  
 Patty Murphy  
 (pxm491): Approved  
 for PG University  
 Accreditation

**History**

1. Feb 20, 2020 by  
 Patty Murphy  
 (pxm491)

*Please list the authors of this proposal including name, rank/title, program/department, and school.*

**Proposer(s) Name**

Diana Ter-Ghazaryan (on behalf of Dr. Cardoso da Silva)  
 Lecturer  
 Dept of Geography and Regional Studies  
 College of Arts and Sciences

**Change Type**                      All Other Changes

Provide a brief  
 summary of the  
 change

This is a proposal to rename this academic program, to update program SLOs, and to realign its curriculum. The proposed name of the program is "BS in Geography and Sustainable Development."

**Career**                                      Undergraduate

**Academic Structure**

School/ College	Department
College of Arts and Sciences	Geography

**Plan Type**                                      Major and/or Degree

Who can take this program?

**Degree Type**                                      Bachelor's

**Degree Name**                                      Bachelor of Science

**Proposed Plan Code**

Plan Name B.S. in Geography **and Sustainable Development**

Will there be any subcomponents within the program such as concentrations, specializations, thesis/non-thesis options, or tracks?

No

Effective Term Spring 2021

First Term Valid Fall 2020

Program Instruction Mode In Person

Where is the program offered?

Location	Please provide the % of instruction at each location.
Coral Gables Campus	100

Program Length (Years) 4

Total Credits **120** ~~122~~

Areas of Knowledge

People & Society

STEM

## To Be Published in the Academic Bulletin

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Program Overview

**Students who graduate with a BS in Geography and Sustainable Development are trained in methods of geographic inquiry and geospatial technology, and work to propose solutions that advance sustainable development worldwide.**

**Overview**

## Program Mission Statement

### Mission

The **Department of the Department of Geography and Regional Studies Geography (GEG) is seeks to transform lives through education, research and innovation, and service. encourage the rigorous investigation of human-environment interactions, and the analysis of spatial patterns related to societal processes. It reaches across disciplines to draw on a range of methods, theories, and perspectives that help us understand how ideas and structures result from the interaction of space, place and time. Through education, we transform The department's core objective is to foster the lives examination, open discussion, and lively debate of our students, helping them to become professionals and global citizens with outstanding analytical geographic issues among faculty and communication skills, creative abilities, and a sense students from all fields of civic responsibility needed in an increasingly complex society. study, enriching the undergraduate curriculum and the university's academic mission through greater communication across disciplines and colleges. Through research and innovation, we advance the frontiers of geographic knowledge while pursuing solutions to some of society's most pressing challenges. Finally, through service, we support organizations It reaches across disciplines to draw on a range of methods, theories, and agencies (from local to global) perspectives that adopt principles of sustainable development as a way to ensure long-term human prosperity without undermining help us understand how ideas and structures result from the integrity and stability interaction of natural space, place and social systems. time:**

**Its aim is to broaden, deepen, and transform the learning community at UM and beyond.**

### Program Goals

**The BS in Geography and Sustainable Development program aims to graduate students who use methods of geographic inquiry and geospatial technology to propose solutions that advance sustainable development worldwide. We Goals Our undergraduate programs (BA and BS) aim to prepare students for positions in teaching, government, private business, urban and regional planning, geographic information systems (GIS), remote sensing (RS), resource management, and environmental analysis, and teaching. analysis: We offer courses that provide students with marketable skills for today's job market, such as optional tracks in urban, environmental, and medical geography, sustainable cities, sustainable development, sustainable food, GIS, digital cartography, satellite remote sensing, land use and land cover analysis, and spatial statistics. as well as courses in geospatial technology which provide students with marketable skills for today's job market: geographic information systems (GIS), digital cartography, satellite remote sensing, land use and land cover analysis, and spatial statistics. During their studies, our students develop global citizenship, which prepares them to examine and find solutions for global problems by using with a different analytical lenses and methods, lens, as well as develop skills to work effectively in multi-cultural environments and and collaborative settings.**

## Student Learning Outcomes

## Student Learning Outcomes

**Foundational Knowledge (SLO1):** Students will **understand the most fundamental** ~~demonstrate knowledge of~~ concepts and theories in **geography** ~~both human~~ and **sustainable development, physical geography** including the spatial patterns and **processes of human** ~~processes, the interrelationships between people~~ and **physical phenomena, the interactions between people and nature, places,** and **the challenges to conciliate human prosperity and environmental conservation worldwide.** ~~the interactions between people and nature.~~

**Scientific Inquiry and Communication Skills (SLO2):** Students will **apply various theoretical** ~~integrate~~ and **methodological approaches in geography** ~~apply concepts~~ and **be able** ~~theories~~ to develop **research questions, critically analyze both qualitative** ~~sound~~ and **quantitative data** ~~original geographical questions as well as apply critical thinking~~ to answer those questions, and **effectively communicate their findings in oral and written formats.** ~~find explanations to geographical questions.~~

**Knowledge Translation Skills (SLO3):** Students will be able to **synthesize geographic knowledge and develop collaborative solutions to problems in sustainable development within the local community, region, and world by demonstrating strong ethical behavior and high levels of responsibility and integrity.**

**Geospatial Technology Skills (SLO4):** Students will create individual portfolios of projects that demonstrate their **capacity to integrate and apply geospatial technologies (Global Positioning Systems, Remote Sensing, and Geographic Information Systems) to data analysis and problem solving.**

~~Students will demonstrate effective written, cartographic, and oral communication.~~

## Curriculum Requirements

## Curriculum Requirements

## University General Education Requirements

<b>ENG 105</b>	English Composition I	3
<b>ENG 106</b>	English Composition II	3
Arts and Humanities Cognate		9
People and Society Cognate		9
Language Requirement		3-9
Minor Requirement		15
Math Sequence		6
Writing Requirement 1		12
Study Abroad (optional)		15
Degree Requirements 2,3		
<b>Choose 1 of the following:</b>		<b>3</b>
<b>GEG 101</b>	<b>Digital Earth</b>	
<b>GEG 105</b>	<b>World Regional Geography</b>	



<b>GEG 110</b>	Introduction to Human Geography	
<b>Required:</b>		
<b>GEG 120</b>	Physical Geography	3
<b>GEG 305</b>	<del>Statistics for the Social Sciences</del> -- COURSE PROPOSAL IN PROGRESS	<del>3</del>
<b>GEG 306</b>	Geographic Research Methods	3
<b>GEG 310</b>	Geographic Information Systems I - COURSE PROPOSAL IN PROGRESS	3
<b>GEG 321</b>	Remote Sensing of the Environment	3
<b>GEG 331</b>	<b>Sustainable Development</b>	<b>3</b>
<b>GEG 410</b>	Geographic Information Systems II	3
<b>GEG 501</b>	Capstone Research Seminar	3

<b>Choose 1 advanced techniques course</b>		<b>3</b>
Elective Courses		9
Additional Electives		12
Total Credit Hours		120

1 To satisfy the College of Arts and Sciences writing requirement in the discipline, students majoring in Geography must take at least one writing eligible course in Geography. GEG 501 satisfies this requirement for most students.

2 Students must complete at least 33 credit hours in Geography with a grade of C- or higher.

3 The overall GPA in courses counted toward the major must be 2.00 or higher.

Plan of Study

## Suggested Plan of Study

### Plan of Study Grid

#### Year One

Fall	Credit Hours
<b>ENG 105</b> English Composition I	3
<b>MTH 161</b> Calculus I	4
<b>UMX 100</b> The University of Miami Experience	0
<del>GEG 101 Digital Earth</del>	<del>3</del>
<b>GEG 110 Introduction to Human Geography</b>	<b>3</b>
<b>GEG 120</b> Physical Geography	3
Language Course	3
Credit Hours	16
Spring	
<b>ENG 106</b> English Composition II	3
<b>MTH 162</b> Calculus II	4
<del>GEG 310 Geographic Information Systems I</del>	<del>3</del>
<b>GEG Elective</b>	<b>3</b>
Language Course	3

Arts and Humanities Cognate Course	3
Credit Hours	16
Year Two	
Fall	
<del>GEG 305 Statistics for the Social Sciences</del>	<del>3</del>
Language Course	3
Arts and Humanities Cognate Course	3
General or GEG Elective Course	3
BIO, CHM, GEL, or PHY Course	3
<b>GEG 331 Sustainable Development</b>	<b>3</b>
Credit Hours	15
Spring	
<del>GEG 306</del> Geographic Research Methods	3
<del>GEG 241</del> Health and Medical Geography	3
<del>GEG 321 Remote Sensing of the Environment</del>	<del>3</del>
Arts and Humanities Cognate Course	3
General or GEG Elective Course	3
<b>GEG 310 Geographic Information Systems I</b>	<b>3</b>
Credit Hours	15
Year Three	
Fall	
<del>GEG 331 Sustainable Development</del>	<del>3</del>
<b>GEG 321 Remote Sensing of the Environment</b>	<b>3</b>
<del>GEG 410</del> Geographic Information Systems II	3
General or GEG Elective Course	3
General or GEG Elective Course	3
People and Society Cognate Course	3
Credit Hours	15
Spring	
300 Level GEG Elective	3
People and Society Cognate Course	3
GEG Elective - Advanced Techniques	3
General or GEG Elective Course	3
General or GEG Elective Course	3
Credit Hours	15
Year Four	
Fall	
300 Level GEG Elective	3
People and Society Cognate Course	3
General or GEG Elective Course	3
General or GEG Elective Course	3

General or GEG Elective Course	3
Credit Hours	15
Spring	
<u>GEG 501</u> Capstone Research Seminar	3
General or GEG Elective Course	3
General or GEG Elective Course	3
General or GEG Elective Course	3
General or GEG Elective Course	3
Credit Hours	15
Total Credit Hours	122

## Rationale

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### Rationale

This proposed change has two goals. The **first goal** is to realign the name of this academic program with the research and educational agenda of our faculty, who apply geographic concepts and methods to inform policies and practices that advance sustainable development around the world. The **second goal** is to reaffirm the orientation of our curriculum and align it to students' interest in sustainable development and communicate that this academic program is commensurate with the pursuit of their professional goals.

The recent evolution of K-12 education has resulted in increasingly fewer American students understanding what geographers do and what the academic discipline of Geography offers, particularly at the college level. As a consequence, a Geography undergraduate degree is seldom considered as a viable career pathway, despite offering some of the broadest and highest-earning career options across the social and natural sciences. By updating the name of this program to incorporate the term "sustainable development" and adding a course dedicated to sustainable development policies and practices (GEG 331), we will convey modernity and relevance, attract and maintain new students, and become more broadly appealing to current and future undergraduate students and their parents.

## Market Demand

Based on a survey of 10% of UM undergraduate students executed by our department, we determined that “sustainability” and “sustainable development” are attractive terms to use in the names of our courses and programs.

Our experience also advises us that students choose geography as a major because of the discipline’s broad applications, and especially its connections to the emerging field of sustainable development. Connecting the discipline with a field of application, our program will offer students high quality, high impact geographic and sustainable development research, teaching and other professional opportunities.

Because of the breadth of knowledge and the analytical methods that geography students acquire during their education, their job outlook is very promising. According to the American Association of Geographers and the Bureau of Labor Statistics, geographers can work in more than 90 occupations available in multilateral organizations, businesses, governmental agencies, non-profit organizations, and education.

The United States Bureau of Labor Statistics reports that the median annual wage for geographers in 2017 was \$76,860. They also estimate that employment of geographers will grow 7% from 2016 to 2026, about as fast as the average for all occupations.

We believe that, with targeted promotion and marketing, demand for this undergraduate program will increase and be robust for the next several decades.

## Relationship to Other Programs

Because we are just renaming our academic program and realigning its curriculum, no change is necessary in the existing relationships with other programs.

## Library Resources Available and Needed to Support the Program

Because we are just renaming this academic program and realigning its curriculum, no additional library resources will be needed. We will continue working with our subject librarians on maintaining acquisition of print resources, digital resources, and geospatial data that students in this program will need.

## Laboratory Facilities, Equipment, and Space Available and Needed to Support the Program

Because we are just renaming our academic program and realigning its curriculum, no additional laboratory facilities, equipment, or space will be needed. The Department of Geography and Regional Studies currently oversees the Campo Sano GIS Lab, which is a state-of-the-art facility and can accommodate the expected significant influx of students in this renamed program.

## Other Resources Available or Needed to Support the Program

No additional resources are needed to support this program.

## Curriculum

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Program Curriculum

Upload Syllabi for Any New Courses

Proposed Schedule of Course Offerings for the First Three Years

## CIP Code

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Proposed CIP Code

## Faculty

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Program Directors

Upload CV(s)

Program Faculty

## Students

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Applicant Pool

Enrollment Projections

## Administration

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Program Administration

## Comparison

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Peer Comparisons

## Documents

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Attach Supporting Documentation

[GEG Supporting Documents.pdf](#)

Reviewer

Comments

**Leonidas Bachas (l.bachas) (09/01/20 6:00 pm):** The Arts and Sciences faculty voted to approve this proposal on April 27, 2020. I support the proposed changes to the BS

**Patty Murphy (pxm491) (09/22/20 3:11 pm):** As shown in the attached supporting documentation from the Chair, the Geography and Regional Studies department faculty voted to approve the proposed name change on 9/17/2019 and the curricular changes on 2/28/2020.

**Patty Murphy (pxm491) (09/22/20 3:15 pm):** The proposed change does not represent a significant departure from the currently approved program. Therefore, notification to or approval from SACSCOC is not required.

**David Chin (dchin1) (10/02/20 9:45 am):** The UCC CONDITIONALLY SUPPORTS the program-change proposal provided that the proponent identifies a multiple-course component of sustainability in the required and elective coursework. Concerns were raised that the only obvious sustainability class in each of these three programs is GEG 331, Sustainable Development, and having only one class in sustainability would not be sufficient to have this specialty area in the title of the degree or in the title of the minor. It was not clear what other sustainability classes were in the proposed curricula, and whether the program electives would require additional sustainability classes.

**David Chin (dchin1) (10/02/20 9:48 am):** The UCC CONDITIONALLY SUPPORTS the program-change proposal provided that the proponent identifies a multiple-course component of sustainability in the required and elective coursework. Concerns were raised that the only obvious sustainability class in this program is GEG 331, Sustainable Development, and having only one class in sustainability would not be sufficient to have this specialty area in the title of the degree. It was not clear what other sustainability classes were in the proposed curricula, and whether the program electives would require additional sustainability classes.

**Patty Murphy (pxm491) (01/11/21 1:46 pm):** A revised matrix is included in the supporting documentation as requested by the UCC as well as a copy of the powerpoint presentation made to the UCC

Key: 33

UNIVERSITY  
OF MIAMI



Department of Geography and Regional Studies  
1300 Campo Sano Building  
P.O. Box 248067  
Coral Gables, FL 33124-4401

March 16, 2020

To: Dr. Leonidas Bachas, Dean, College of Arts and Sciences

From: Dr. José Maria Cardoso da Silva, Professor and Chair,  
Department of Geography and Regional Studies

This memo confirms that on September 27, 2019, the faculty of the Department of Geography and Regional Studies voted in support of appending *and Sustainable Development* to the names of the Department's existing BA and BS degrees, as well as the minor in Geography, so that all majors and minors will be named *Geography and Sustainable Development*. In addition, on February 28, 2020, the Department voted to promote slight changes in the core curriculum of these three degrees, such as outlined in the proposal.

Our faculty is committed to promoting globally-relevant education that prepares students for careers that address society's grand challenges. We forward this proposal to you for review by the College of Arts and Sciences faculty.

Sincerely,

Dr. José Maria Cardoso da Silva  
Professor and Chair  
Department of Geography and Regional Studies



April 9, 2020

**Re: Letter of Support for B. A and B.S. in Geography and Sustainable Development—Program renaming and reorientation.**

I hereby confirm my support for the proposal submitted by the Department of Geography and Regional Studies for renaming and realigning the B.A. and B.S. programs.

The changes proposed underscore the Department's commitment to sustainability and introduce a projective element, grounding the study of Geography in project-based analysis and problem solving.

Training students to "propose solutions that advance sustainable development worldwide," brings the realigned programs closer to the School of Architecture's own mission and project-based learning, pointing to potential collaboration on joint undergraduate majors that combine analysis and design. I have already discussed such possibilities with Department Chair Jose Maria Cardoso da Silva, including a joint B.S. in Urban Studies/Planning, and will continue to explore synergies that may result from this realignment.

Sincerely yours,

Rodolphe el-Khoury  
Dean and Professor of Architecture & Urbanism

Ph: 305-284-5000  
Fax: 305-284-5245  
www.arc.miami.edu





March 23, 2020

To: Prof. Charles Mallery, Associate Dean for Graduate and  
Administrative Services, College of Arts & Sciences

From: Prof. José Maria Cardoso da Silva, Professor and Chair,  
Department of Geography and Regional Studies

RE: Proposed GEG degree name changes

Dear Prof. Mallery:

At Professor Ira Sheskin's request, the Geography representative on the CCC, I send this memo to provide additional information on the name changes that we are proposing for the Department of Geography's undergraduate programs.

"Sustainable Development" is most commonly defined as development that meets present needs without compromising the needs of future generations. In other words, sustainable development aims to promote economic prosperity, social inclusion, environmental conservation, and good governance everywhere. Global priorities have been codified in the 17 [Sustainable Development Goals](#) (SDGs) which provide a shared blueprint for future peace and prosperity.

Geography is the study of places and the relationships between people and their environments. Geographers explore both the physical characteristics and human society on the earth's surface. They also examine how human culture interacts with the natural environment and the manner in which locations and places impact people. Geography seeks to understand where things are found, why they are there, how they develop and change over time, and what needs to be done to ensure good living standards for everyone, everywhere.

The longstanding, strong link between Geography and Sustainable Development has been discussed in the academic world for decades (e.g., Purvis and Grainger 2004; Whitehead 2006). In fact, Geography has been considered as the most fundamental discipline for students interested in pursuing careers in Sustainable Development because designing and implementing Sustainable Development Goals requires the core strengths of the discipline of Geography: integrative, place-based thinking at multiple geographic scales. The linkage between Geography and Sustainable Development has been recognized in the US and abroad, as several departments of Geography have formalized research and teaching on Sustainable Development among their major goals (see Table 1 for details). The wave of undergraduate programs that have launched across the country are more likely to be housed in a geography department than any other traditional discipline. We are following national trends and remain the department best equipped to educate young people about sustainable development.

The Department of Geography and Regional Studies at the University of Miami has embraced Sustainable Development as its [unifying research theme](#) for several years. We have been offering courses that are strongly linked to the SDG agenda related to **global health, urbanization, food and water, population dynamics, environmental conservation, and climate change**. No other unit offers comparable breadth and depth related to the SDGs. Our students also receive cutting-edge training in modern geospatial methods and analytical tools that allow them to integrate, visualize, and model socio-environmental issues.

Our department was the first in the College to offer an undergraduate course dedicated to sustainable development. In addition, we have been: (1) mainstreaming and reinforcing the key concepts of sustainable development in the syllabi of our core courses, (2) expanding our elective courses to explore in-depth important components of sustainable development (e.g., Sustainable Food; Sustainable Cities; Biogeography and Conservation; Global Human Rights; Climate Change and Security), and (3) adding new courses that allow the students to explore social problems by using geospatial methods and tools (e.g., GIS for Health and Environment; Crime Mapping and Analysis; GIS and Environmental Modelling). More recently, we collaborated with the College of Architecture to offer a Master in Professional Sciences in Urban Sustainability and Resilience. We are well equipped to offer an innovative, diverse and flexible curriculum to students who are interested in both Geography and Sustainable Development. The student learning outcomes described in the proposals are our commitment to preparing professionals who will tackle the enormous challenges before us.

We hope that this memo provides additional context for the College Curriculum Committee to support the addition of *Sustainable Development* to our Geography degrees with modest changes to our undergraduate curriculum. This is a natural outcome of a process that has evolved for several years. We are happy to provide more information if requested.

Sincerely,

José Maria Cardoso da Silva, Ph.D.  
Professor and Chair,  
Department of Geography and Regional Studies

#### References

Purvis, Martin, and Alan Grainger, eds. 2004. *Exploring Sustainable Development: Geographical Perspectives*. Routledge.

Whitehead, Mark. 2006. *Spaces of Sustainability*. 1st edition. Routledge.

#### Attachments

Table 1. Sample Programs in Sustainability or Sustainable Development Administered by Departments of (or Inclusive of) Geography

Table 1. Sample Programs in Sustainability or Sustainable Development Administered by Departments of (or Inclusive of) Geography

There are few examples from high-ranking institutions because the overwhelming majority of private schools, and many high-ranking public schools, do not have geography departments. Among US News' top university rankings, the only top-25 institutions with a geography program are Dartmouth, UCLA, and Berkeley. In the top-50, only 11-12 institutions have geography departments (and half are in CA). A longer list of sustainability and sustainable development degrees are listed [here](#), and while a few are housed in business or ecology programs, etc., many sustainability degrees are organized as interdisciplinary programs. **There is no other discipline that more commonly houses sustainability programs than geography/environment.** So this table should not be interpreted as aspirational peers; rather it speaks volumes about the decisions institutions make—particularly public schools with significant budgetary constraints—when initiating sustainability degrees that yield the biggest “bang for the pedagogical buck.”

Institution	Department	City	Degree
University of Texas Austin	Geography and the Environment	Austin, TX	B.A. Sustainability
University of Oklahoma	Geography and Environmental Sustainability	Norman, OK	B.A./B.S. Environmental Sustainability
University of St. Andrews	Geography and Sustainable Development	St. Andrews, UK	B.Sc. Sustainable Development
University of Iowa	Geographical and Sustainability Sciences	Iowa City, IA	B.S. Sustainability Science
Miami University	Geography	Oxford, OH	B.A. Geography and Sustainable Development
University of Oregon	Geography	Eugene, OR	B.A. Geography – Economy, Environment, & Sustainability
University of British Columbia	Geography	Vancouver, CA	B.A. Environment & Sustainability
University of Massachusetts Amherst	Geography	Amherst, MA	B.A. Geography – Environmental Geography & Sustainability
University of Tennessee Knoxville	Geography	Knoxville, TN	B.A. Sustainability
San Diego State University	Geography	San Diego, CA	B.A. Environment, Sustainability, & Policy
University of Colorado Denver	Geography & Environmental Sciences	Denver, CO	B.A. Environment, Society & Sustainability
Salem State University	Geography and Sustainability	Salem, MA	B.A. and B.S. Geography & Sustainability
University of Texas San Antonio	Political Science and Geography	San Antonio, TX	B.A. Geography and Environmental Sustainability
Western Oregon University	Geography and Sustainability	Monmouth, OR	B.A. Sustainability
University of Northern Colorado	Geography, GIS, and Sustainability	Greeley, CO	B.A. Environmental & Sustainability Studies
Indiana State University	Earth and Environmental Systems (Anthropology, Geography, Geosciences, GIS)	Terre Haute, IN	B.A./B.S. Geography and Sustainability
UNC Greensboro	Geography, Environment, and Sustainability	Greensboro, NC	B.A. Environment & Sustainability
University of Minnesota Duluth	Geography and Philosophy	Duluth, MN	B.A. Environment, Sustainability, & Geography (emphasizing Sustainable Development)
Northern Michigan University	Earth, Environmental, & Geographical Sciences	Marquette, MI	B.A. Environmental Studies & Sustainability
Shippensburg University	Geography and Earth Science	Shippensburg, PA	B.S. Sustainability
SUNY Oneonta	Geography & Environmental Sustainability	Oneonta, NY	B.A. Environmental Sustainability
Ohio University	Geography	Athens, OH	B.A./B.S. Geography – Urban Planning & Sustainability
University of Southern Mississippi	Geography	Hattiesburg, MS	B.S. Geography – Sustainable Development
Slippery Rock University	Geography, Geology, and the Environment	Slippery Rock, PA	B.S. Geography: Environmental Studies and Sustainability
Cal State East Bay	Anthropology, Geography, & Environ. Studies	Hayward, CA	B.S. Geography – Resources and Sustainability
Stephen F. Austin State University	Anthropology, Geography & Sociology	Nacogdoches, TX	B.A. Sustainable Community Development
Pittsburg State University	History, Philosophy, and Social Sciences	Pittsburg, KS	Environmental Geography & Sustainability

Note: FIU's School of Environment, Arts, and Society offers an online B.A. in Sustainability and the Environment (FIU lacks a formal geography department).

## **Sustainable Development Goals and Geography Courses**

The purpose of this document is to show the strong linkage between the thematic courses offered by the Department of Geography and Regional Studies and the UN Sustainable Development Goals (see Table 1)

In addition to these courses, the Department offers several other courses that have students working at the interface between Geography and Sustainable Development (such as GIS, Research Methods, Spatial Statistics). In GIS courses, for example, students are required to work on a semester project, and many choose a topic related to sustainable development.



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Coral Gables, Florida 33124

Phone: 305.284.8259  
[www.abess.miami.edu](http://www.abess.miami.edu)

April 2, 2020

Reference: Abess Center support for Geography name change

Greetings,

The Abess Center for Ecosystem Science and Policy and its Faculty Advisory Committee have no major issues re: the GEG name change and support the proposed changes.

Should you need anything further, please let us know. I can be reached at 305.528.6319 or [kbroad@rsmas.miami.edu](mailto:kbroad@rsmas.miami.edu).

Sincerely,

Kenneth Broad, Ph.D.  
Director, Abess Center for Ecosystem Science and Policy, University of Miami  
Professor, Marine Ecosystems and Society, University of Miami  
Co-Director, Center for Research on Environmental Decisions, Columbia University



To: Leonidas Bachas, Ph.D.  
Dean, College of Arts and Sciences

From: Antonio Nanni, CAE Chair

Subject: Rename Undergraduate Geography undergraduate programs

Date: April 1, 2020

This letter confirms the support of the Department of Civil, Architectural and Environmental Engineering (CAE) for the changes in the names of the undergraduate programs offered by the Department of Geography and Regional Studies.

Regards,







Presentation Made to UCC

# Geography and Sustainable Development: A Natural Pedagogical Fit



# program goals

a global, interdisciplinary toolkit to address the world's biggest challenges

geography methods and concepts



advance sustainable development

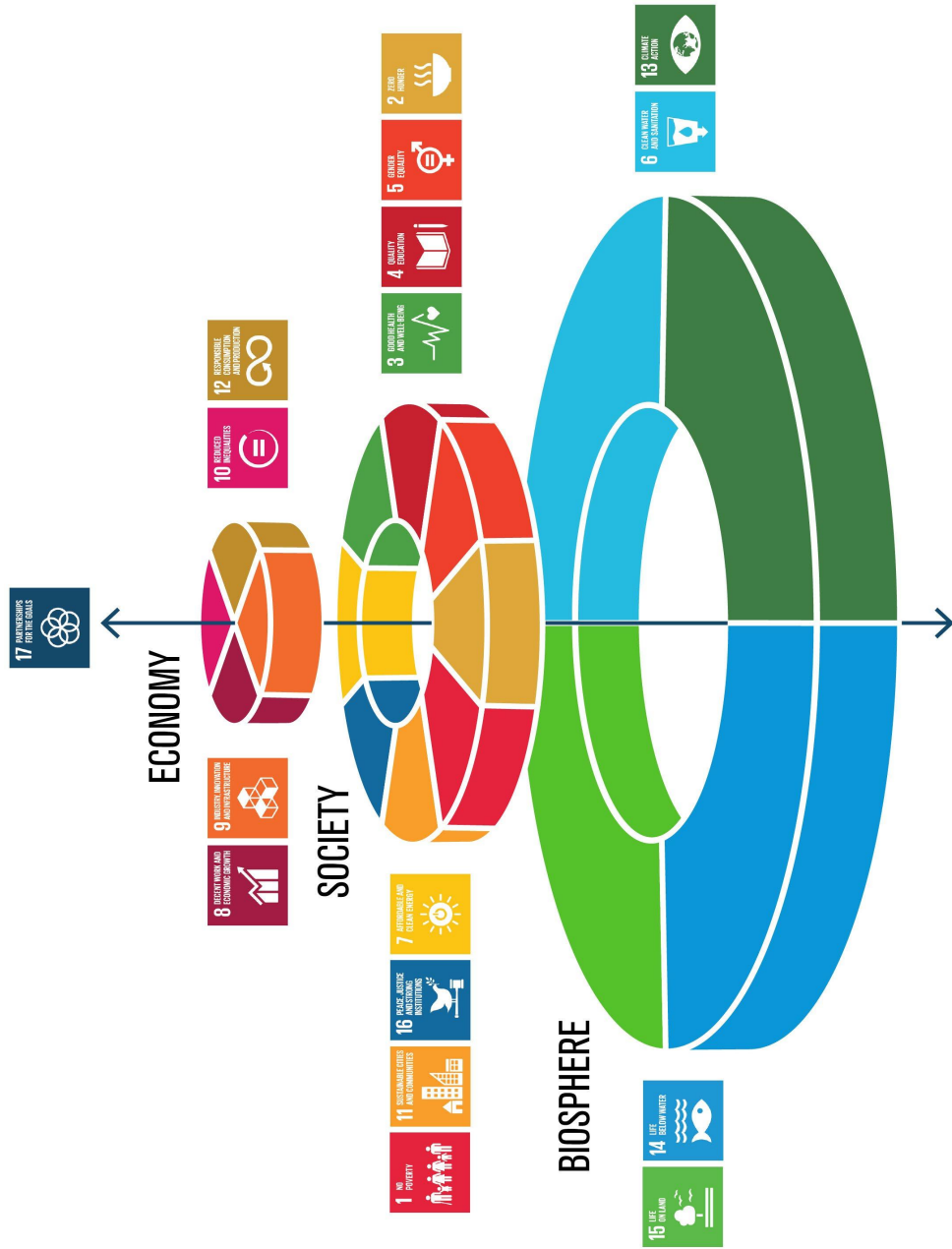
geography and sustainable development



# sustainable development



## biosphere, society, economy



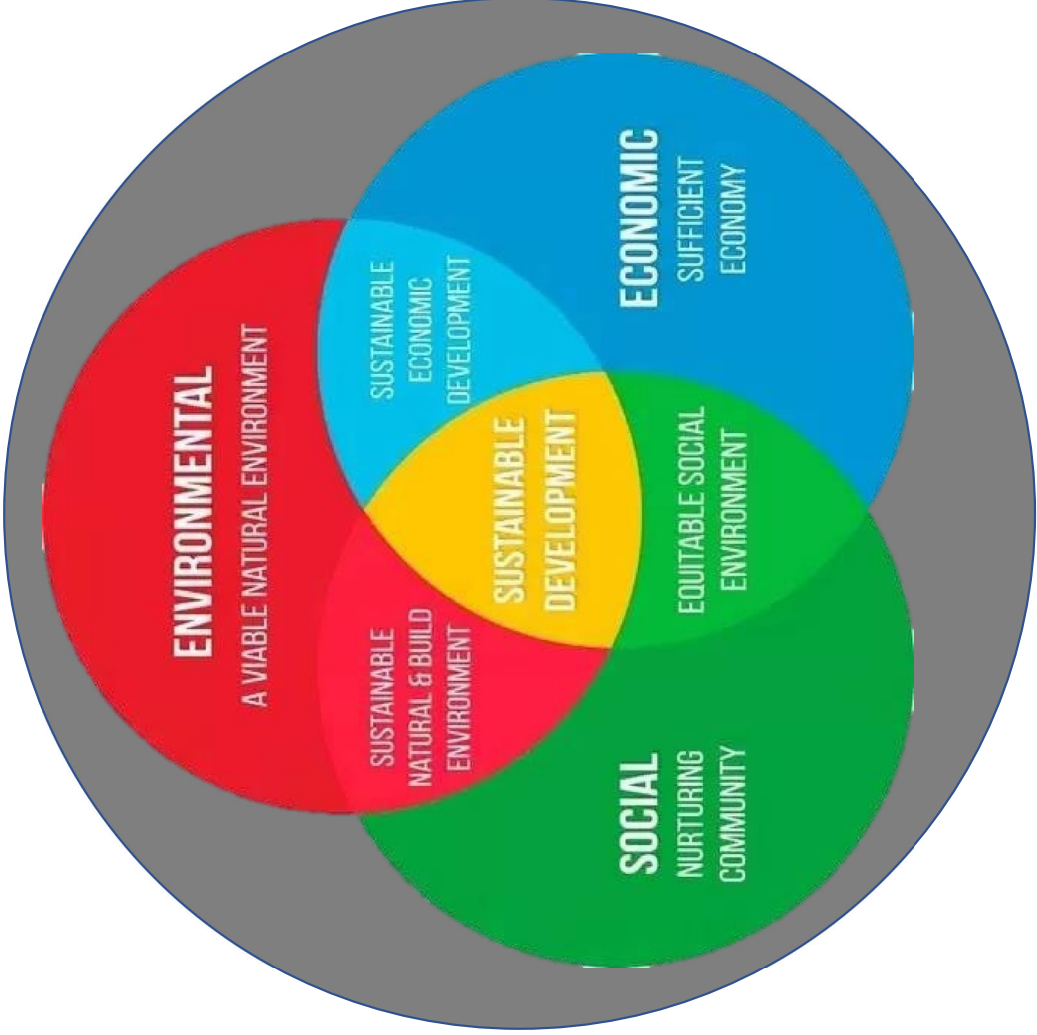
industry, innovation, and infrastructure; reduced inequalities; responsible consumption & production

poverty eradication, social justice, peace, human health, no hunger, sustainable cities, education, gender equality

protect terrestrial & aquatic ecosystems, climate action, water & sanitation, basic earth systems

# sustainable development

## GOVERNANCE



human-environment interactions, a.k.a. **geography**

- nature
- cities
- geopolitics
- food
- water
- energy
- landscape
- gender
- climate
- health
- planning
- equity

program structure: before feedback

fundamentals

Physical  
Geography

Human  
Geography

Sustainable  
Development

methods

Research  
Methods

Capstone

Additional  
BS requirements

GIS I & II

Remote  
Sensing

electives

Electives:  
Statistics, Web GIS, Environmental Modeling, Population, Food, Water, Cities, Climate Change,  
Equity, Conservation, Global Health, Natural Hazards...

# program structure: revised BA

fundamentals

Physical  
Geography

Human  
Geography

Sustainable  
Development

**BA**  
**9+6+12+3=**  
**30 credits**

methods

Research  
Methods

Capstone

GIS I & II

Remote  
Sensing

electives

Electives: Sustainable Development  
Population, Food, Water, Cities, Climate  
Change, Equity, Conservation, Global  
Health, Natural Hazards...

Electives: Methods  
Spatial Statistics, Web GIS, Digital  
Cartography, Python for GIS, Environmental  
Modeling...

# program structure: revised BS

fundamentals

Physical  
Geography

Human  
Geography

Sustainable  
Development

**BS**  
**9+6+9+12=**  
**36 credits**

methods

Research  
Methods

Capstone

GIS I & II

Remote  
Sensing

electives

Electives: Sustainable Development  
Population, Food, Water, Cities, Climate  
Change, Equity, Conservation, Global  
Health, Natural Hazards...

Electives: Methods  
Spatial Statistics, Web GIS, Digital  
Cartography, Python for GIS, Environmental  
Modeling...

program structure: revised minor

fundamentals

Physical  
Geography

Human  
Geography

Sustainable  
Development

minor  
9+6=  
15 credits

methods

Research  
Methods

Capstone

GIS I & II

Remote  
Sensing

electives

Electives: Sustainable Development  
Population, Food, Water, Cities, Climate  
Change, Equity, Conservation, Global  
Health, Natural Hazards...

Electives: Methods  
Spatial Statistics, Web GIS, Digital  
Cartography, Python for GIS, Environmental  
Modeling...





**We know what students want**

# What's in a Name? Undergraduate Student Perceptions of Geography, Environment, and Sustainability Key Words and Program Names

Stoler et al. 2020 *Annals of the American Association of Geographers*

<b>Analytics</b>	<b>Environment</b>	<b>Global</b>	<b>Regional</b>
<b>Big Data</b>	Food and Agriculture	<b>Health</b>	<b>Social Media</b>
<b>Cities</b>	Gender	History	<b>Society</b>
<b>Climate Change</b>	Geographic Information Systems (GIS)	<b>Human Rights</b>	<b>Spatial Analysis</b>
<b>Conservation</b>	Geography	Hydrology	<b>Sustainability</b>
<b>Crime</b>	Geomorphology	Immigration	<b>Technology</b>
<b>Culture</b>	Geopolitics	<b>Medical</b>	Transportation
<b>Development</b>	Geoscience	<b>Miami</b>	Urban
<b>Digital</b>		Mobility	<b>Water</b>
<b>Economics</b>		Population	

\*Based on 2018-2019 surveys from 4,388 undergraduates across 4 universities (including UM)

## other programs at UM

### **MPS in Urban Sustainability and Resilience**

4 core courses (2 GEG + 2 ARC)

12 credits of electives

**Initiated by GEG**

### **Undergraduate Certificate in Sustainability**

Human Impacts on Natural World (3)

Environmental Politics & Policy (3)

Social Implications (3)

9 credits of electives from 13 departments

**In discussions  
with ECS to  
rehome to GEG  
for better fit**

### **MS in Sustainable Business**

10 Sustainable Business Core Courses (Business School)

9 credits of electives from RSMAS & CAE

a natural fit

geography and sustainable development



a global pedagogical trend and natural home for  
sustainable development studies