

# CERTIFICATE IN SUSTAINABILITY

## Overview

The certificate program is intended to equip students with knowledge and skills for implementing positive change through environmentally responsible practices in various fields; to serve as a curricular adjunct to sustainable initiatives at UM; to foster a culture of conservation at the University; to enhance students' preparation for a variety of careers, including engineering, architecture, business, marketing, government, and more; and to affirm UM's commitment to sustainability and complement its efforts to enhance environmental education.

To obtain the sustainability certificate, students will complete 18 credits from the courses below.

Students may take courses to align with their major or minor, or individual interests (e.g., energy, green buildings, natural resource management). Note that some courses on the list may require one or more prerequisites. It is the responsibility of students to obtain any permissions for waivers of prerequisites from the appropriate parties in a given School or College. Courses not on the list below may be substituted; students should obtain permission for substitutions in advance from the Department of Geography's Director of Undergraduate Studies.

Students must be enrolled full time and all courses for the Certificate must be passed with no lower than a "C" grade. Students who successfully complete the program will receive a notation on their transcripts that they have received the Sustainability Certificate.

## Prerequisite Courses

- POL 322 has a prerequisite of POL 201 or POL 202; it is only offered in Summer
- MSC 340 has a prerequisite of MSC 111
- ARC 223 has a prerequisite of ARC 102 and ARC 122
- INS 322 has a prerequisite of INS 102 or ECO 211 and ECO 212, or permission of instructor
- INS 421 has a prerequisite of INS 102 or permission of instructor
- ECO 345 has a prerequisite of ECO 211 and ECO 302
- MSC 345 has a prerequisite of ECO 211
- GEG 341 has a prerequisite of any 100 level GEG course.

\*This program is not eligible for federal or state financial aid. Contact the Office of Student Financial Assistance and Employment (<https://finaid.miami.edu/>) for further assistance.

## Curriculum Requirements

Code	Title	Credit Hours
<b>Group 1: Human Impacts on Natural World</b>		<b>3</b>
ECS 111	Introduction to the Earth's Ecosystem	
GSC 103	Evolution of the Modern Earth's Environment	
MSC 220	Climate and Global Change	
<b>Group 2: Environmental Politics &amp; Policy</b>		<b>3</b>
ECS 113	Introduction to Environmental Policy	
ECS 372	Special Topics in Ecosystem Science and Policy	
POL 322	Environmental Politics and Policy	
MSC 340	Ocean Policy	
MSC 313	Coastal Law	
MSC 346	Climate Science and Policy	
<b>Group 3: Social Implications</b>		<b>3</b>
ARC 223	Architecture and the Environment	
INS 322	Economics of Development and the Environment	
INS 421	Poverty and the Environment: A Hands-On Approach	
ECO 345	Environmental Economics	
MSC 345	Economics of Natural Resources and the Environment	
ECS 310	Sustainable Living	
GEG 345	Global Water Security Sustainability	
GEG 341	Population, Health, and Environment	
<b>Additional Courses</b>		<b>9</b>
Choose 9 additional credits from courses below:		

APY 307	Human Adaptation
APY 360	Anthropology of Food
APY 435	Anthropology of Nature and Environment
BIL 103	Introduction to Ecology
BIL 220	Evolution and Disease
BIL 330	Ecology
BIL 430	Tropical Ecology
BIL 433	Conservation in Practice
ECS 201	Seminar Series in Contemporary Environmental Issues I
ECS 202	Seminar Series in Contemporary Environmental Issues II
ECS 301	Tools for Environmental Decision-Making: The Quantitative Perspective
ECS 302	Perspectives on Environmental Decision Making
ECS 433	Conservation in Practice
ECS 501	Interdisciplinary Environmental Theory
GEG 331	Sustainable Development
GEG 334	Biogeography and Conservation
GEG 530	Conservation and Development
GSC 106	Geological Influences on Society
GSC 107	Natural Disasters: Hollywood vs. Reality
GSC 550	Hydrogeology
HIS 229	Consumer Society: A Global History
HIS 368	Nature and the Environment in American History
INS 101	Global Perspectives
INS 102	Global Economics
INS 201	Globalization and Change in World Politics
LAS 320	Special Topics in Latin American and Caribbean Environment
LAS 321	Latin American Environmental Issues
LAS 520	Interdisciplinary Topics in Latin American and Caribbean Environments
LAS 521	Latin American Environmental Issues
POL 323	Global Warming, Politics and the European Union
POL 370	Global Energy Politics
POL 531	Global Environmental Politics
POL 531	Global Environmental Politics
POL 545	Environmental Policy Making
SOC 341	Social and Cultural Change
CAE 430	Water-Resources Engineering I
CAE 530	Water Resources Engineering II
CAE 560	Sustainable Construction
CAE 581	Energy-Efficient Building Design
CET 240	Environmental Quality Control
CET 340	Introduction to Environmental Engineering
MBE 410	Marine Conservation Science
RSM 520	Climate and Society
<b>Total Credit Hours</b>	<b>18</b>

## Mission

Students will gain an understanding of how sustainability concepts have bearing on climate change, mass movements of populations, limits to energy and water supplies, and biodiversity.

## Goals

The Certificate program is intended:

- to equip students with knowledge and skills for implementing positive change through environmentally responsible practices in various fields;
- to serve as a curricular adjunct to sustainable initiatives at UM;
- to foster a culture of conservation at the University;
- to enhance students' preparation for a variety of careers, including engineering, architecture, business, marketing, government, and more; and
- to affirm UM's commitment to sustainability and complement its efforts to enhance environmental education.

## Student Learning Outcomes

- Students will demonstrate an understanding of human impacts on the environment.
- Students will demonstrate an understanding of methods of reducing human impacts on the environment.
- Students will demonstrate an ability to communicate effectively about sustainability.