

# SUSTAINABILITY AND CLIMATE ACTION, CERTIFICATE

(Code 488-601)

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This certificate is for students who are concerned about the escalating climate crisis and who seek the foundational understanding and skills to lead societal and technological transitions necessary to achieve a sustainable world. It is designed to complement students' primary field(s) of study so that they can apply their learning from these five courses to whatever future academic studies and/or career paths they follow. All enrolled students will gain curricular breadth, essential to developing their interdisciplinary thinking to address this 21st century problem.

Minimum of 15 credits with at least 9 credits at the 300-level or above.

Code	Title	Credits
<b>Climate science fundamentals – take 1 of the following</b>		
BIOL 180	Environmental Biology and Conservation	
CHEM 127	Chemistry and Climate	
CHEM 304	Environmental Chemistry	
GEOG 340	Climatology	
GEOL 304	Global Environmental Change	
<b>Climate policies and systems – take 1 of the following</b>		
ECON 268	Environmental Economics	
ENV/GEOG 377	U.S. Environmental and Sustainability Policy	
GEOG 369	Geography of Food	
GEOG/ENV 378	International Environmental Problems and Policy	
PH 115	Global Health	
SOC 301	Environmental Sociology	
<b>Scientific/technical solutions – take 1 of the following</b>		
BIOL 328	Conservation Biology	
ENV 389	Taking the Measure of Sustainability	
GEOG 338	Remote Sensing of the Environment	
GEOL 122	The Future of Global Energy	
GEOL 301	Earth Resources and Sustainability	
MSE 221	Living in a Materials World	
<b>Societal transitions – take 2 of the following</b>		
AIS 343	Contemporary American Indian Communities	
CJ 318	Topics in Communication and Social Advocacy (when offered as Environmental Communication)	
ENV 101	Sustainability Basics and Beyond	
ENV 310	Sustainable Cities	
ENV 330	Waste & Society: Energy, Food, and Efficiency	

GEOG 354	Sustainable Placemaking and Community
PH/NRSG 225	Introduction to Public Health
SOC 317	Sociology of Food and Agriculture

Note: A minimum of 48 unique credits must be earned between the student's major and this certificate for purposes of meeting graduation requirements for first- and second-degree programs.

## Program Learning Outcomes

Students completing this program will be expected to meet the following learning outcomes:

- Explain in an easily accessible manner the fundamental basis of climate change from a scientific viewpoint and exclude false narratives.
- Identify connections between physical changes in climate systems and changes in social systems: this includes how climate threatens human social systems in addition to how policy decisions affect climate change.
- Illustrate how both technological advances and changes to policy and behavior can either mitigate the severity of climate change and/or improve adaptation of human and natural systems in a changing climate.