



SF STATE UNIVERSITY Certificate in Climate Change Causes, Impacts, & Solutions <https://climatehq.sfsu.edu/climatehq>

WHICH COURSES SHOULD I TAKE?

CERTIFICATE REQUIREMENTS:

- Students must take 4 different courses, 1 in each of these 4 areas (12-18 units total):
 - ☐ Area 1: **FOUNDATIONAL** courses
 - ☐ Area 2: **CAUSES** courses
 - ☐ Area 3: **IMPACTS** courses
 - ☐ Area 4: **SOLUTIONS** courses
- Note: Courses can not be counted for more than 1 category at a time.
- ☐ At least 1 of the 4 courses must be designated as an **ADVANCED CLIMATE JUSTICE** course.
- ☐ At least 8 units counted toward the Certificate must be **upper-division** level.
- ☐ At least 8 units counted toward the Certificate must be **graded on an A-F basis**.
- ☐ At least half the Certificate units must be taken **in residence at SFSU**.
- Certificate coursework must also:
 - Have a minimum average GPA of 2.0.
 - Have a grade of CR, C, or better.
 - Be completed within 7 years from registration for your first Certificate course.

Good news! Courses used to complete the Certificate can also be counted toward GE, major, & minor requirements!

TIP! Fill out this table as you complete or plan your Certificate Requirements

Certificate Requirement	Which course did you take or do you plan to take?
Take 1 FOUNDATIONAL Course	ENVS 130: Intro to Environmental Studies
Take 1 CAUSES Course	CHEM 380: Chemistry Behind Environmental Pollution
Take 1 IMPACTS Course	BUS 450 Greening of Business
Take 1 SOLUTIONS Course	ENVS 570: Applied Local Sustainability★
1 of the 4 courses you took must be designated as ADVANCED CLIMATE JUSTICE . Put a ★ next to it in this table.	

Go to [this link](#) for instructions on how to earn the Certificate
If you have other questions about the Certificate, see the [FAQs](#)

See next pages for Certificate courses →

CERTIFICATE COURSES:

Area	Courses in that Area	<i>ADVANCED CLIMATE JUSTICE?</i>	Course Attributes
FOUNDATIONAL COURSES	BIOL 318: Our Endangered Planet		● E1 LLD Pre-Fall 2019 ● UD-B: Physical Life Science ● Am. Ethnic & Racial Minorities ● Environmental Sustainability ● Global Perspectives
	ENVS 130: Intro to Environmental Studies		● Environmental Sustainability
	ERTH 335: Global Warming		● UD-B: Physical Life Science ● Environmental Sustainability ● Global Perspectives
	GEOG 160: Intro to Environmental Science		● B2: Life Science ● B3: Lab Science ● Environmental Sustainability ● Global Perspectives
	RRS 276: Race, Activism, & Climate Justice	★	● B2: Life Science ● Am. Ethnic & Racial Minorities ● Environmental Sustainability ● Global Perspectives ● Social Justice
	WGS 578: Women, Globalization, & Ecology	★	
CAUSES COURSES	*BIOL 161: Climate Change and the Oceans		
	*BIOL 300: Nature Study		● UD-B: Physical Life Science ● Environmental Sustainability
	*BIOL/ERTH 577: Climate and Ecological Interactions		
	*BIOL 617 Environmental Physiology		
	*BUS 450 Greening of Business		
	CHEM 380: Chemistry Behind Environmental Pollution		● UD-B: Physical Life Science ● Environmental Sustainability
	COMM 572: Communication and Environmental Justice	★	● UD-C: Arts and/or Humanities ● Environmental Sustainability ● Social Justice
	ENVS 130: Intro to Environmental Studies		● Environmental Sustainability
	ENVS 460: Energy Justice & Sustainability	★	
	ERTH 260: Physical Processes in the Atmosphere		● B1: Physical Science ● B3: Lab Science ● Environmental Sustainability ● Global Perspectives
	ERTH 335: Global Warming		● UD-B: Physical Life Science ● Environmental Sustainability ● Global Perspectives

	ERTH 365: Extreme Weather in a Warming World		● UD-B: Physical Life Science ● Environmental Sustainability ● Global Perspectives
	ERTH 535: Planetary Climate Change		
	GEOG 101: Our Physical Environment		● B1: Physical Science ● Environmental Sustainability
	GEOG 160: Intro to Environmental Science		● B2: Life Science ● B3: Lab Science ● Environmental Sustainability ● Global Perspectives
	GEOG 314: Bioclimatology		
	GEOG 435: Geography of Global Transportation	★	
	GEOG 500GW: Physical & Human Dimensions of Climate Change	★	● Graduation Writing Assessment (GWAR)
	*GEOG 666: Geography of Garbage: Recycling and Waste Reduction	★	● Environmental Sustainability
	*IR/GEOG 428: International Political Economy of Food and Hunger	★	
	IR 735: Seminar in Global Environmental Policy	★	
	LS 401: International Development & Resource Justice	★	● UD-D: Social Sciences ● Environmental Sustainability ● Global Perspectives
	PLSI 354: Politics, the Environment, & Social Change		● UD-D: Social Sciences ● Environmental Sustainability ● Social Justice
	RRS 276: Race, Activism, & Climate Justice	★	● B2: Life Science ● Am. Ethnic & Racial Minorities ● Environmental Sustainability ● Global Perspectives ● Social Justice
	USP 514: Sustainable Development	★	● Environmental Sustainability ● Social Justice
	WGS 593: Gender, Health & the Environment	★	● UD-D: Social Sciences ● Environmental Sustainability ● Global Perspectives
IMPACTS Courses	AA S 587: Asian Americans & Environmental Justice	★	● UD-D: Social Sciences ● Am. Ethnic & Racial Minorities ● Environmental Sustainability ● Social Justice
	BECA 502: Environmental Communication on Electronic Media	★	● UD-C: Arts and/or Humanities ● Environmental Sustainability ● Social Justice
	*BIOL 161: Climate Change and the Oceans		
	*BIOL 300: Nature Study		● UD-B: Physical Life Science ● Environmental Sustainability
	*BIOL 617 Environmental Physiology		
	*BUS 450 Greening of Business		
	ENVS 470: Climate Politics & Policy	★	● Environmental Sustainability

			● Global Perspectives
	ENVS 480: Climate Change Adaptation & Justice	★	
	ERTH 260: Physical Processes in the Atmosphere		● B1: Physical Science ● B3: Lab Science ● Environmental Sustainability ● Global Perspectives
	ERTH 330: California Water		● UD-B: Physical Life Science ● Environmental Sustainability
	ERTH 335: Global Warming		● UD-B: Physical Life Science ● Environmental Sustainability ● Global Perspectives
	ERTH 365: Extreme Weather in a Warming World		● UD-B: Physical Life Science ● Environmental Sustainability ● Global Perspectives
	GEOG 314: Bioclimatology		
	GEOG 500GW: Physical & Human Dimensions of Climate Change	★	● Graduation Writing Assessment (GWAR)
	*IR/GEOG 428: International Political Economy of Food and Hunger	★	
	RRS 276: Race, Activism, & Climate Justice	★	● B2: Life Science ● Am. Ethnic & Racial Minorities ● Environmental Sustainability ● Global Perspectives ● Social Justice
	USP 514: Sustainable Development	★	● Environmental Sustainability ● Social Justice
	WGS 593: Gender, Health & the Environment	★	● UD-D: Social Sciences ● Environmental Sustainability ● Global Perspectives
SOLUTIONS Courses	BECA 502: Environmental Communication on Electronic Media	★	● UD-C: Arts and/or Humanities ● Environmental Sustainability ● Social Justice
	BIOL 532: Restoration Ecology		
	BIOL 534: Wetlands Ecology	★	
	BIOL 671: Ecology & Evolution of Marine Systems II	★	● Environmental Sustainability
	COMM 572: Communication and Environmental Justice	★	● UD-C: Arts and/or Humanities ● Environmental Sustainability ● Social Justice
	*COMM/ENVS 675: Climate Ambassadors Practicum in the Climate Change Certificate	★	
	ECON/FIN/ENVS 651: Student Managed Fund in Environmental, Social & Governance (ESG) Investments		
	ENVS 460: Energy Justice & Sustainability	★	
	ENVS 470: Climate Politics & Policy	★	● Environmental Sustainability ● Global Perspectives
	ENVS 480: Climate Change Adaptation & Justice	★	

	ENVS 530: Environmental Leadership & Organizing	★	
	ENVS 570: Applied Local Sustainability	★	● Environmental Sustainability
	GEOG 314: Bioclimatology		
	GEOG 433: Geography of Urban Transportation	★	
	GEOG 435: Geography of Global Transportation	★	
	GEOG 500GW: Physical & Human Dimensions of Climate Change	★	● Graduation Writing Assessment (GWAR)
	*GEOG 666: Geography of Garbage: Recycling and Waste Reduction	★	● Environmental Sustainability
	*IR/GEOG 428: International Political Economy of Food and Hunger	★	
	IR 735: Seminar in Global Environmental Policy	★	
	LS 430: Future of the Forests	★	● UD-B: Physical Life Science ● Environmental Sustainability ● Global Perspectives
	RRS 276: Race, Activism, & Climate Justice	★	● B2: Life Science ● Am. Ethnic & Racial Minorities ● Environmental Sustainability ● Global Perspectives ● Social Justice
	USP 515/GEOG 667: Environ. Justice: Race, Poverty, & the Envir.	★	● Environmental Sustainability ● Global Perspectives ● Social Justice
	WGS 578: Women, Globalization, & Ecology	★	

Check course prerequisites in the SF State Bulletin: <http://bulletin.sfsu.edu/courses/>

*courses included in the certificate curriculum following revisions conducted in Spring 2023.

Please note that the old (2021-22 and 2022-23) SFSU bulletins don't reflect these new asterisked courses. But they count towards certificate coursework.