



UNIVERSITY OF
TEXAS
ARLINGTON

**OFFICE OF
SUSTAINABILITY**

Faculty Advisory Network on Sustainability

Integrating Sustainability in Curriculum Template

Instructor Name: Charles Travis

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Department/College: History / COLA

Semester/Year: Fall 2022

Course Name: Geog 2301 Physical Geography

Description

A look at the earth from the earth's perspective! This course incorporates the United Nation's Sustainable Development Goals and provides a deeper exploration of the physical and natural dimensions of geography, including earth history, formation, land and oceanic use, atmospheric circulation, storms, and geo-hazards (tornadoes, volcanoes, earthquakes), climate change, bio-geography, ocean and coastal ecosystems, glaciology and different landforms such as deserts, steppes, savannas, rainforests, plains, and mountains. Will explore different cultural perspectives on the natural elements of the earth, and theories such as the GAIA hypothesis that posits the earth as a conscious living being, and the systems detailed above integrated and functioning like the organs of human body. Formally the course involves a survey of geographies of the natural environment and human-environment interactions with emphasis on spatial patterns and processes. Physical geography is the spatial study of natural phenomena that make up the environment, such as rivers, mountains, landforms, weather, climate, soils, plants, and any other physical aspects of the earth's surface. Physical geography focuses on geography as a form of earth science. It tends to emphasize the main physical parts of the earth – the lithosphere (surface layer), the

atmosphere (air), the hydrosphere (water), and the biosphere (living organisms)—and the relationships between these parts.

In a brief paragraph, describe the changes to the course you have revised.

The course has been enhanced by framing its topics in physical geography within the discourses of the United Nations Sustainable Development Goals. For the test run in Fall of 2022, I will focus specifically on Sustainable Development, Energy, Clean Water and how the study of Physical Geography can contribute to Environmental Justice, by utilizing readings selected from Professor Andrew Milson’s UN Sustainable Development Goals reading list.

Required Texts

- **Open-Source E-Textbook:** R. Adam Dastrup. 2020. Physical Geography and Natural Disasters. Creative Commons. (No Need to Purchase) <https://slcc.pressbooks.pub/physicalgeography/>
- **UN Sustainable Development Goal (UNSDG) Readings** Compiled by Professor Andrew Milson.

Learning Outcomes aligned with sustainability

Students will gain a better understanding of the physical geography of the earth that operate as a series of interrelated systems, which the UN Sustainable Development Goals can contribute to by bringing our anthropogenic component of the planet into balance with its atmosphere, hydrosphere, biosphere and lithosphere.

Alignment with the UN Sustainable Development Goals

Please describe which SDGs align with the course teachings- <https://sdgs.un.org/goals>



SDG 1- No Poverty	
SDG 2- Zero Hunger	
SDG 3- Good Health and Well Being	
SDG 4- Quality Education	
SDG 5- Gender Equality	
SDG 6- Clean Water & Sanitation	Hydrology, Oceanography
SDG 7- Affordable & Clean Energy	Geology and Global Warming
SDG 8- Decent work & Economic Growth	
SDG 9- Industry Innovation & Infrastructure	
SDG 10- Reduced Inequalities	
SDG 11- Sustainable Cities & Communities	
SDG 12- Responsible Consumption & Production	
SDG 13- Climate Action	Global Warming
SDG 14- Life Below Water	Oceanography, Hydrology.
SDG 15-Life on Land	Natural Disasters, Atmosphere, Biogeography
SDG 16- Peace, Justice, & Strong Institutions	
SDG 17- Partnerships for the Goals	

Additional Information and Resources

Optional Supplemental Texts:

- Gervais, Bruce. 2019. *Living physical geography*. 2nd Ed. Macmillan Higher Education,
- Foresman, T. and Strahler, A. 2012. *Visualizing Physical Geography*. Wiley & Sons.