

NATIVE ROOTS

Greener Futures | Walking the Kálhaculture Way

Center for World Indigenous Studies

Center for Traditional Medicine

This course is based on the research and writing of

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Course Description

Global levels of carbon dioxide (CO₂) are the highest ever reached in human history, with devastating effects on the planet and all the living beings. One important consequence is that elevated CO₂ decreases protein concentration in plants, which diminishes the nutritional quality of food. This places many Indigenous Peoples at risk loss of natural resources, traditional foodways and malnutrition. Indigenous peoples science and wisdom has for millennia tested and safeguarded wild plants which have been reliable, sustainable sources of food and medicine. Yet climate change is severely upsetting this ecological balance.

This course explores indigenous knowledge systems, the benefits of wild plants for health and medicine, and the negative effects of climate change on wild plants. It also provides specific steps about how to become an activist scholar and a community change maker, in order to apply and share the principles of Indigenous ways of knowing with the purpose of protecting and nourishing the environment.

This course is designed to inform and enable a new generation of activist scholars who will define their climate change mission. Indigenous allies, students, teachers, and everyday consumers will learn how Indigenous knowledge holds the keys to mitigating the effects of climate change and about the many ways plants, both wild and agricultural nourish and heal the earth, humans and all other beings.

General Objectives

- Define Climate Change, in particular the effects of CO₂
- Identify how Climate Change is altering plant nutrition
- Name why this is important to Indigenous peoples and their allies
- Identify the value and application of plants as foods and medicines
- List ways to counteract the effects of climate change specifically on plants
- Explore plant and foods heritage protection projects
- Define Indigenous Ways of Knowing
- Define Indigenous intelligence
- Define Activist Scholarship
- Present and apply tools to become/being a climate change activist
- Apply activist scholar principles to specific case studies/stories

Course Modules

Module 1. Indigenous Ways of Knowing

Module 2. The Problem: The Changing Climate is Changing Plants

Module 3. Plants as Food, Plants as Medicine

Module 4. Becoming an Activist Scholar: The Solution

Module 5. Stories of Activist Scholars

Module 6. The Očhéthi Šakówiŋ: A Case Story

Module 7. Your Story Goes Here!



Module 1

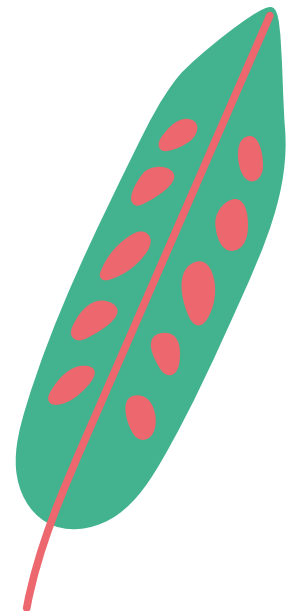
Indigenous Ways of Knowing/Indigenous Sciences

Objectives

- Deepen understanding of what we mean by culture and kálhaculture
- Discuss the basic ideas of the Fourth World Theory
- Define Indigenous knowledge systems

Table of Contents

1. Kálhaculture
 - A. Culture
 - B. Kálhaculture
 - C. Etymology
 - D. Meaning
2. Colonialism
 - A. Indigenous Peoples
 - B. Colonialism
 - C. Settler Colonialism
 - D. Environmental Injustice from Settler Colonialism
 - E. Nations and States
3. Fourth World Theory
 - A. Fourth World = Indigenous Nations
 - B. Fourth World Theory
 - C. Decolonization and FWT
 - D. Foundations of Fourth World Theory
 - E. Fourth World Geopolitical Engagement
4. Indigenous Knowledge Systems
 - A. Indigenous Knowledge Systems
 - B. Types of Knowledge
 - C. Indigenous Methods of Learning
 - D. Instruments for Learning and Integrating Knowledge
 - E. Indigenous Intelligence
 - F. Values and the Sense of Wholeness
5. Environmental justice



Module 2

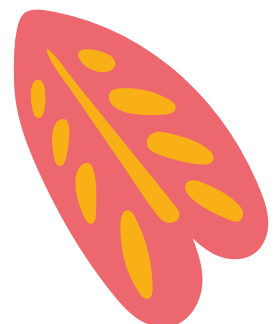
The Problem: The Changing Climate is Changing Plants

Objectives

- Define Climate Change.
- Understand the effects of climate change on plants.
- Compare those effects in different Nations.
- Relate to the effects of climate change on the student's community.

Table of Contents

1. Climate Change
 - A. What is Carbon Dioxide (CO₂)?
 - B. The Problem: Elevated levels of Greenhouse Gases in the atmosphere
2. How is Climate Change affecting plants?
 - A. Effect of Rising CO₂ Levels on Plants.
 - B. Effects of Rise in Atmospheric CO₂ levels since the Industrial Revolution.
 - C. Effects on Climate Change on Industrialized Nations.
 - D. Effects on Climate Change on Indigenous peoples and majority world rural poor.
 - E. Indigenous Communities and Activism.
 - F. Menominee Tribe Forest Principles of Forest Management.
3. Climate Change Action
 - A. Climate Change Action is Universal and Local.
 - B. Indigenous Ways of Knowing vs Capitalist Ways.
 - C. Lessons from Indigenous Peoples.
 - D. Indigenous Knowledge Applied to Climate Change.
 - E. Kálhaculture Applied to Climate Change.



Module 3

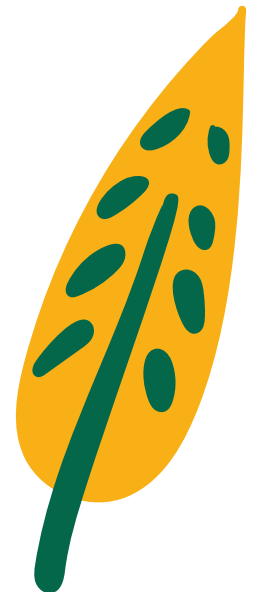
Plants as Food, Plants as Medicine

Objectives

- Discuss the difference between natural foods and medicines and those that are introduced or produced by agribusiness
- Understand the basics of plant medicine and nutrition
- Discuss sustainable agricultural practices as alternatives to present-day mechanized practices

Table of Contents

1. Indigenous Philosophy for Cultivating
2. Traditional Ecological Knowledge
 - A. Permaculture
 - B. Permaculture in Practice
 - C. Indigenous People's Plants
3. Current Agricultural System
4. Indigenous Food Sovereignty
5. Whole Foods vs. Processed Foods
6. Indigenous Peoples' Sustenance
7. Plants, Nutrition and Health
 - A. Plants as Food and Medicine
 - B. Red Food
 - C. Blue and Purple Foods
 - D. Orange Food
 - E. Yellow Food
 - F. Green Food
 - G. White and Black Food
8. Plant Medicines, Gifts from Mother Earth
 - A. Medicines from Nature
 - B. Natural Antibiotics
 - C. Anti-inflammatory Spices/Plants
 - D. Adaptogens
 - E. Sedative/Hypnotic plants
 - F. Traditional Medicines in Danger
9. Proposed Solutions
10. Indigenous stewards
11. Action Projects
 - A. Salish Country Cookbook
 - B. Medicines of the Jungle, Western Mexico



Module 4

Becoming an Activist Scholar: The Solution

Objectives

- Define Scholar Activism
- List the skills and assets needed to become an activist scholar
- Develop a mission for scholar activism
- Present & apply tools to become/being a climate change activist

Table of Contents

1. What is an activist scholar?
 - A. Skills needed
 - B. Identifying the problem(s)
 - C. Overcoming helplessness
2. Mindfulness as a tool for overcoming helplessness
3. Mindfulness exercises

Module 5

Stories of Activist Scholars

Objectives

- List some scholar activism examples
- Present the diversity of practices of scholar activism
- Relate the student's mission with the experience of scholarly activism

Table of Contents

Here we will focus on the activist scholars who shared about their work



Module 6

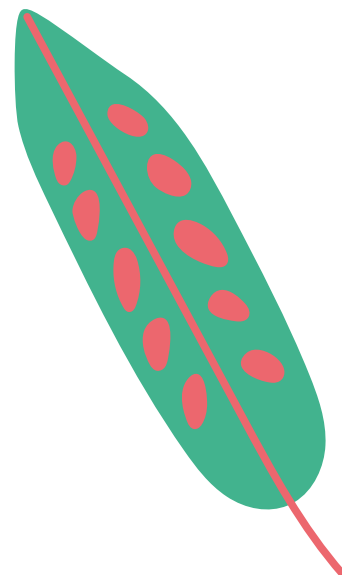
The Očhéthi Šakówiŋ: A Case Story

Objectives

- Explore a case of collective activism
- Present the activism strategies of The Očhéthi Šakówiŋ
- Understand tribal sovereignty and its implications

Table of Contents

1. The Meaning of Očhéthi Šakówiŋ
2. Origins of the Term Sioux
3. Očhéthi Šakówiŋ vs Sioux?
4. Who are the Očhéthi Šakówiŋ?
5. Očhéthi Šakówiŋ Tribes Today
6. Očhéthi Šakówiŋ Territories
7. The Očhéthi Šakówiŋ & the Land
 - A. Očhéthi Šakówiŋ Land Stewardship
8. Tribal Sovereignty
9. Standing Rock Tribe/Reservation
 - A. Standing Rock Tribe & #NoDAPL
 - B. Water Protector Camps
 - C. Significance of Water Protector Camps
 - D. Indigenous Youth & #NoDAPL
 - E. Indigenous Sovereignty at #NoDAPL Protests
10. Cheyenne River Tribe/Reservation
 - A. La Plant, Cheyenne River
 - B. La Plant Community Teaching Garden
 - C. Why Does La Plant Grow its Own Food?
 - D. Food Deserts in South Dakota
 - E. Consequences of Food Deserts
 - F. Creating Food Security
 - G. Food Sovereignty
11. Yankton Tribe/Reservation
 - A. Yankton Gardening Initiative
 - B. Mutual Care and Mutual Aid
 - C. Why Mutual Aid?
 - D. Mutual Aid and Sovereignty
 - E. Nutritional Trauma
 - F. Nutritional Trauma in Indigenous Communities
 - G. Historical Trauma
12. Indigenous Community Healing



Module 7

Your Story Goes Here!

Objectives

- Promote activism among the students
- Share students' missions and activism
- Connect with other students who work on climate change

Module Description

In this module course participants will upload their mission and brief video about their passion and vision.



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Native Roots, Greener Futures: Walking the Kálhaculture Way, Syllabus

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