

**Jane Doe**

**Fall 2018**

**Instructor: Dr. Albie Miles**

**Learning Objectives: SCFS 490 - Senior Farming Systems Practicum (Fall 2018)**

**Host Organization:** Double D Farm and Ranch

**Host Location:** 61-470 Kamehameha Hwy, Hale'iwa, HI 96712

**Learning Objectives:** By the end of Fall, 2018, I, Jane Doe, will have achieved the following learning objectives:

**APSX 490X: Senior Farming Systems Practicum [120 hours]**

**1. Livestock care methods:** Through writing and oral communication, display an advanced, beginner-level knowledge of how Double D ranch manages their farm animals for the health of the animals and environment. Specifically, this includes all aspects of livestock care such as nutrition, feed, watering, bedding, rotational grazing practices and manure management. I will also achieve an advanced beginner-level of knowledge of the basic health care (pest management and medical treatments) of animals on the farm. I will learn how the farm uses sustainable methods for the living quarters and arrangements.

**2. Sustainable enterprise management practices:** Through writing and oral communication, display an advanced, beginner-level knowledge of how a farm ranch operates, including the reuse/recycling of farm materials, ranch layout, and the utilization of multiple on-site business ventures. Additionally, display an advanced, beginner-level knowledge of the methods used for creating and running an efficient and sustainable business.

**John Doe**

**April 2019**

**Instructor: Dr. Albie Miles**

**Learning Objectives: SCFS 490 - Senior Farming Systems Practicum (Fall 2019)**

**Host Organization:** Dancing Carrot Farm, Hyogo, Japan

**Host Contact:** Shinji Hashimoto

**Learning Objectives:** By the end of Summer, 2019, I, John Doe, will have achieved the following learning objectives:

**APSX 490X: Senior Farming Systems Practicum [120 hours]**

**1. Farming Practices:** Achieve an understanding, at an advanced level, the agricultural practices (soil fertility and soil quality management, pest management, biodiversity conservation) employed on the farm, including the ways that traditional and ancestral practices have shaped key production methods. Understanding, at an advanced level, the ways that this organic farm replenishes nutrients, acquires inputs (e.g. water, seeds, fertilizers, etc.), and manages pests, weeds and pathogens.

**2. Crops and Culture:** Achieve an understanding, at an advanced level, the cultural significance of each of the major crops grown and consumed on the farm and the region. Understanding, at an advanced level, the histories and stories associated with the cultivation, preparation and celebration of the traditional crops grown on the farm and in the wider region. Understanding, at an advanced level the histories and traditional stories and values associated with the agricultural methods and land use practices on the farm and in the wider region. Understanding, at an advanced level, the farming culture in this area of Japan.

**3. Ecological Processes and Management:** Gain an understanding, at an advanced level, the ecological processes taking place within the farming system as a result of the key agronomic and land use practices and (e.g. the use of cover cropping and nutrient cycling and enhancement of soil quality, use of a duck-rice crop-animal system and nutrient cycling and pest management, soil preparation, soil quality and pest management).

**4. Marketing and Social Relationships:** Learn how this farm sells its food, learn about the setup of the farm's "teikei" (CSA program), and gain a better understanding of the community's relationship to this farm and to local agriculture in the region. Achieve an understanding about the relationship between this farm and the academic community in the region, and determine if this farm, or related farms, work with researchers interested in advancing farming systems sustainability. Gain an understanding of the differences in Organic Certification in Japan and the US. Achieve an understanding of how the regional or national government of Japan supports organic and sustainable agriculture.

**Jane Doe**

**April 8, 2019**

**Instructor: Dr. Albie Miles**

**Learning Objectives: SCFS 490 - Farming System Practicum (Fall 2019)**

I am proposing to do a Summer Internship at Kāko'o 'Ōiwi under the instruction of Kanekoa Kukea Schultz, Director of Kāko'o 'Ōiwi, and Ali'i Miner, Land Management Consultant and Native Hawaiian Practitioner.

**Learning Objectives:** By the end of my Summer 2019 internship at Kāko'o 'Ōiwi, I, Jane Doe, will have achieved the following learning objectives:

**1. Land Management and Daily Work of the Organization:** Through writing and oral presentations, demonstrate an intermediate-level understanding of the specific agronomic practices (including but not limited to the cycling of organic matter, crop diversity in space and time, system diversity, fallow periods, water management, and species diversity) applied at Kāko'o 'Ōiwi. Explain how these practices maintain productivity of the land, soil health, influence local ecological processes and promote the conservation of soil quality, natural resources, and native plant and animal species in the Ko'olau moku.

**2. Integrated Pest Management:** Through writing and oral presentations, demonstrate an advanced level understanding of the theoretical approaches to IPM intended to boost crop yields while decreasing the negative impacts of pests, pathogens and weeds. Demonstrate an understanding of the vital pest management strategies employed by Kāko'o 'Ōiwi that protect beneficial organisms and the environment.

**3. Educational Programming and Professional Level Work Skills and Contacts:** Demonstrate an advanced-level understanding of the land-based education programs being taught to a variety of age groups at Kāko'o 'Ōiwi. Develop a minimum of 5 new professional contacts aligned with my future professional interests.

**4. Community Networking:** Through writing and oral presentations, demonstrate an intermediate-level understanding of the key social, economic, educational, and food security and availability impacts of Kāko'o 'Ōiwi on their neighbors. Explain how the partnership with neighboring organizations benefit the community and projects conducted at Kāko'o 'Ōiwi.

**5. Ecological and Economic Sustainability of the Agricultural Enterprise and Organization:** Through writing and oral presentations, demonstrate an intermediate-level understanding of the essential farming system inputs and practices Kāko'o 'Ōiwi utilizes and the degree to which they enhance the sustainability and resiliency of the agricultural enterprise over the long-term. Understand the primary mission, goals, objectives, and crucial operations of the non-profit organization associated with Kāko'o 'Ōiwi and how this supports the sustainability of the farm and education goals of the organization. Demonstrate an understanding of how land-based activities, educational and cultural activities at Kāko'o 'Ōiwi are supported through grants, produced sales and other income.

**Jane Doe**

**Fall 2019**

**Instructor: Dr. Albie Miles**

**Learning Objectives: SCFS 490 - Senior Farming Systems Practicum (Fall 2019)**

**Host Organization:** Kuhialoko, Waiawa Kai, 'Ewa, O'ahu

**Host Contact:** Ali'i Miner [meakauarockdahale@yahoo.com](mailto:meakauarockdahale@yahoo.com)

**Learning Objectives:** By the end of Summer, 2019, I, Jane Doe, will have achieved the following learning objectives:

**APSX 490X: Senior Farming Systems Practicum [120 hours]**

**1. Traditional Hawaiian fishpond management strategies and field-pond/wetland kalo production:** Through writing, oral communication and site host evaluation, I will demonstrate an intermediate-level understanding of the skills and knowledge of traditional Hawaiian fishpond management strategies and field-pond/wetland kalo production.

**2. Invasive Species Identification:** Through writing and oral communication and site host evaluation, I will be able to recognize a minimum of 10 key invasive species (including plants and animals) within the wetland ecosystem and understand a range of effective eradication techniques.

**3. Native Species Identification:** Through writing and oral communication and site host evaluation, I will demonstrate the ability to recognize a minimum of 10 of native species (including plants and animals) in the wetland ecosystem and describe their optimal habitat conditions to better understand specific conservation targets and methods used on site.

**4. Watershed Hydrology and Land Use Impacts:** Through writing and oral communication and site host evaluation, I will demonstrate an intermediate level understanding of the natural watershed, local hydrology and the impacts of agriculture and upstream land use on water quality in the wetlands and fishponds.

**5. State and Federal Permitting Process for Wetland Restoration Projects:** Through writing and oral communication and site host evaluation, I will demonstrate an intermediate level of understanding of the formal state and federal permitting in wetland and fishpond restoration initiatives. and funding processes required to support non-profit organizations that are involved in environmental conservation, natural resource management, and cultural preservation.

**6. Geography, Cultural History and Educational Goals:** Through writing and oral communication, I will demonstrate an advanced level understanding of the geography and cultural history of the area, as well as the ecological, educational, and cultural goals that the organization aims to accomplish in the future.

**John Doe**

**Fall 2019**

**Instructor: Dr. Albie Miles**

**Learning Objectives: SCFS 490 - Senior Farming Systems Practicum (Fall 2019)**

**Host Organization:** Kuhialoko, Waiawa Kai, 'Ewa, O'ahu

**Host Contact:** Ali'i Miner [meakuarockdahale@yahoo.com](mailto:meakuarockdahale@yahoo.com)

I am proposing to do my Practicum Internship at Kuhialoko, under the instruction of Kahu Ali'i Miner.

**Learning Objectives:** By the end of the Fall 2019 semester, I, John Doe, will have achieved the following learning objectives:

- 1. State Permitting Processes and Special Considerations:** Through writing and oral communication, I will demonstrate an advanced level of understanding regarding prior considerations with state and/or federal laws for loko i'a restoration projects, to include the points of contact, forms necessary to begin, and all the necessary environmental considerations.
- 2. Cultural Considerations:** Through writing and oral communication, I will demonstrate an intermediate level of knowledge about the cultural considerations and protocols associated with traditional Hawaiian restoration projects.
- 3. Tools and Methods for Clearing and Dredging the Pond:** Through writing and oral communication, I will demonstrate an advanced level of knowledge about the types of tools and techniques used to clear invasive plant and animal species, along with the considerations that must be taken regarding the handling of those organisms to minimize ecological impacts such as soil erosion, sedimentation and other forms of water pollution.
- 4. Initial Stocking of Fish in a Loko I'a:** Through writing and oral communication, I will demonstrate an intermediate level of knowledge about the methods of acquiring and introducing fish to start a loko i'a and subsequent management strategies for optimizing the health and productivity of the loko i'a.
- 5. Surrounding Area Considerations:** Through writing and oral communication, I will demonstrate an intermediate level of understanding for the peripheral considerations needed for loko i'a restorations in this area, to include the interactions of neighboring plant and animal species, as well as interactions between the site and its surrounding ecosystems.

**John Doe**

**April 25, 2019**

**Instructor: Dr. Albie Miles**

**Learning Objectives: SCFS 490 - Farming System Practicum (Fall 2019)**

I am proposing to do my Practicum Internship at MA'O Organic Farms, under the instruction of Kūkui Maunakea-Forth, Co-Founder and Executive Director, and Gary Maunakea-Forth, Co-Founder and Farm Operations Director.

**Learning Objectives:** By the end of my internship at MA'O Farms, I, John Doe, will have achieved the following learning objectives:

**1. Soil Fertility Management:** Through writing and oral presentations, demonstrate an intermediate-level understanding of the key soil fertility management practices being utilized at MA'O Organic Farms. Demonstrate the ability to test soils, determine the most effective types of natural fertilizers and know when to apply them to soils, perform nutrient budgeting, maintain healthy soils, and monitor the conditions and indicators of soil quality over time. Explain how these practices help to sustain productivity, overall soil health, ecological processes taking place in a given environment, and how these interactions affect local plant and animal species.

**2. Integrated Pest Management:** Through written and oral presentations, demonstrate an intermediate-level understanding of the management practices/strategies used to control/limit weeds, insect pests, and pathogens at MA'O Organic Farms. Demonstrate knowledge of the key pests and weeds on the farm, and the most effective management techniques needed for successful mitigation, suppression, or control.

**3. Organic Certification:** Through written and oral communication, demonstrate a beginner-level understanding of organic certification, to include the points of contact, forms, proper federal and state permitting, requirements, costs, and certifications involved in the process. Explain the challenges involved and create a comprehensive plan to demonstrate a beginner-level understanding of the process.