

**UNIVERSITY OF HAWAI'I
SYSTEM ARTICULATION AGREEMENT**

**Agriculture 120/200
Horticulture 262
Tropical Plant and Soil Science 200**

September 2005

UNIVERSITY OF HAWAII SYSTEM ARTICULATION AGREEMENT

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INTRODUCTION

The University of Hawai'i is comprised of ten campuses located on four islands in the State of Hawai'i. While each campus has a unique identity and mission, the ten campuses operate as one system.

Career Pathways

The State of Hawai'i and its educational systems are participating in Career Pathways with an overall theme of "Six pathways, one system." The six pathways are:

1. Arts and Communication
2. Business
3. Health Services
4. Industrial and Engineering Technology
5. Natural Resources
6. Public and Human Services

At the secondary and postsecondary levels, the goal of Career Pathways is to provide curriculum standards that meet business and industry requirements. Implementing these standards will ensure student attainment of a high level of academic and technical skills, a seamless transition from secondary to postsecondary educational programs and between postsecondary campuses, and a satisfying career for which the student is well prepared.

Hawai'i P-20 Initiative

The overarching goal of the P-20 initiative is to improve student achievement at all levels of education. To this end, two of the goals of P-20 are:

1. To align standards, curricula, and assessments across all components of the state's public education system.
2. To improve transition among the components of the education system, as well as from an educational setting to the workforce.

During the course of their education, students may decide to transfer from one campus to another in the University of Hawai'i (UH) system. The development of an articulated program of study supports the transfer of earned academic credits within the UH system.

PURPOSE

The primary purpose of this articulation agreement is to facilitate the matriculation of students and the transfer of courses across the university system. Moreover, it is intended to inform students, whose program of study requires Agriculture courses as part of their degree requirements, of the program opportunities that are available to them throughout the UH system.

Students will have the opportunity to receive credit for equivalent courses taken elsewhere in the UH system, reducing the potential problems of having to retake a similar course or not being credited with work that has been completed.

AGREEMENTS AND PROCEDURES

1. **Scope of Agreement.** This Articulation Agreement applies among the UH Community Colleges; and between the University of Hawai'i at Manoa, and the University of Hawai'i at Hilo.
2. **Number of Credits to be Awarded.** Transfer credit among University of Hawai'i campuses for the following courses:
 - A. Agriculture (AG) 120 (3 credits)
 - B. Agriculture (AG) 200 (4 credits)
 - C. Horticulture (HORT) 262 (3 credits)
 - D. Tropical Plant and Soil Science (TPSS) 200 (3 credits)
3. **General Guidelines for the Application and Award of Transfer Credits.**
 - A. Student Eligibility: Students must be currently enrolled at a participating UH campus to be eligible for the award of any transfer credit.
 - B. Timeline for Application: Students should apply for transfer credits during their first year of attendance at the receiving campus.
 - C. Transferability: Credits awarded within the guidelines established in this Agreement will transfer between and among the designated University of Hawai'i campuses. However, students should be informed by both "sending" and "receiving" campuses that transferred credits may **not** be applicable to programs outside of this Agreement.
 - D. Campus Procedures: Each UH campus which is a party to this Agreement will be responsible for establishing procedures which detail the timeline and deadlines for application, review of requests for award of transfer credit, and the appeals process for such credit.

Award of Credit through Credit-By-Examination. AG 120/200, HORT 262, and TPSS 200 as identified in this Agreement will be eligible for credit-by-examination for those students wishing to receive credit for prior learning/experience obtained outside of the University of Hawai'i system. Each campus will establish procedures and administer its own exam, which may include a written test, performance test, and/or oral interview. Once credits are awarded, they are transferable among campuses listed in this Agreement.

The table in this document lists all 100 & 200-level Principles of Horticulture, Plant Science and Tropical Crop Science courses which are equivalent within the University of Hawai'i system. If a course is unique to a campus and, hence, does not have an equivalent course within the UH system, then it is not listed in the table. Also, the course outline(s) in this document have been approved by the faculty and administrations of all campuses represented in this signed agreement.

This Articulation Agreement will remain in effect until September 2009. It will be subject to review in July 2009 and may be continued, revised, or discontinued with the consent of all faculty members and administration of all campuses represented in this Agreement.

| | UH Mānoa | UH Hilo | Hawai'i CC | Maui CC | Windward CC |
|-------------------------------|----------|----------|------------|---------|----------------|
| Tropical Crop Science | TPSS 200 | | | | |
| Principles of Horticulture | | HORT 262 | AG 200 | AG 200 | |
| Plant Science | | | | | AG 120 |

Agriculture 120 Plant Science or
Agriculture 200 Principles of Horticulture or
Horticulture 262 Principles of Horticulture or
Tropical Plant and Soil Science 200 Tropical Crop Science

Prepared 9/9/05

A. Course description

Haw CC: Introduces botany and plant physiology. Discusses plant nutrients, moisture, environmental requirements and plant propagation. Studies culture and production techniques for selected ornamental crops. Plant propagation techniques and the cultivation of selected economic crops will be covered using a student garden and greenhouse.

MauCC: Introduces botany and plant physiology. Discusses plant nutrient, moisture, and environmental requirements. Treats plant propagation. Studies culture and production techniques for selected ornamental crops.

UHH: Introduction to the various divisions of horticulture and the relationship of plants to environment. Plant structure and function. Opportunity for observation and practice of various horticultural technologies. Students are required to participate in a garden project.

UHM: Relation of plants, nutrients, environment and cultural practices to tropical crop production.

WinCC: The study of plant science, morphology, anatomy, physiology, classification, growth, growth regulators, and propagation. Students are required to write a 10 to 15 page research report.

B. Hours per week

HawCC: lecture 3 hours/ lab 3 hours (4 credits)

MauCC: lecture 3 hours/ lab 2 hours (4 credits)

UHH: lecture 2 hours/ lab 2-1/2 hours (3 credits)

UHM: lecture 3 hours (3 credits)

WinCC: lecture 2 hours/ lecture/lab 2 hours (3 credits)

C. Prerequisites, or required preparation:

HawCC: Eng 22 or ESL 15 or placement in Eng 100; and Math 22 or placement in Math 24X or higher.

MauCC: No prerequisites.

UHH: No prerequisites.

UHM: Biol 172 or Bot 101 or consent.

WinCC: No prerequisites.

D. Intended Student Learning Outcomes:

1. Describe and explain general plant structure and function in relation to plant growth and development.
2. Demonstrate knowledge of horticultural principles in the cultivation of plants.
3. Examine commercial agricultural enterprises to become familiar with employment opportunities and the impact of horticulture on our lives.

E. Course content

| <u>Course content</u> | <u>related SLO</u> |
|---|--------------------|
| 1. Impact of Plants on the Environment, Man & Society | (3) |
| 2. Origins of Agriculture | (3) |
| 3. The Cell | (1) |
| 4. Plant Tissues | (1) |
| 5. Plant Organs and Functions | (1) |
| 6. Cell Reproduction | (1) |
| 7. Photosynthesis | (1 & 2) |
| 8. Respiration | (1 & 2) |
| 9. Sexual Propagation | (2) |
| 10. Asexual Propagation | (2) |
| 11. Plant Nutrition | (2) |
| 12. Commercial Plant Production | (3) |

Course content

related SLO

Skills

- | | |
|---|-----------|
| 1. Locate information. | (1, 2, 3) |
| 2. Distinguish relevant and reliable information. | (1, 2, 3) |
| 3. Identify plant structures. | (1) |
| 4. Describe a production system for a crop or agricultural enterprise. | (3) |
| 5. Determine what appropriate propagation methods would be used for a given crop. | (2) |
| 6. Recognize best management practices for a given crop. | (3) |
| 7. Demonstrate professional work habits. | (campus) |

F. Text and materials: Varied

G. Reference materials: Varied

H. Auxiliary materials and content: Varied

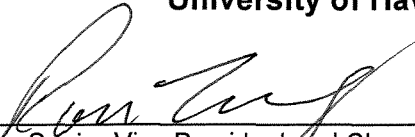
I. Learning Assessment Tasks:

1. Use objective tests, essay questions or research/term papers to evaluate student's ability to explain or identify plant structures or functions.
2. Use objective tests, essay questions, research/term papers or applied projects to evaluate student's knowledge of horticulture principles.
3. Use objective tests, essay questions, research/term papers, case studies, class presentations or applied projects to evaluate student's comprehension of commercial agricultural enterprises and their impact on the state's economy.

J. Methods of instruction: lecture, lab and/or field work, field trips, etc.

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University of Hawai'i at Hilo Signature Page



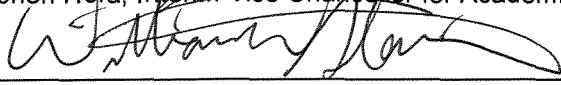
Rose Tseng, Senior Vice President and Chancellor

9/20/05
Date




Stephen Hora, Interim Vice Chancellor for Academic Affairs

9/20/2005
Date



William Steiner, Dean, College of Agriculture, Forestry
and Natural Resource Management

9/20/05
Date



Sheldon C. Furutani, Professor

9/16/05
Date

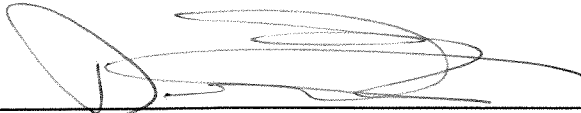


William S. Sakai, Professor

9/9/05
Date

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University of Hawai'i at Mānoa Signature Page



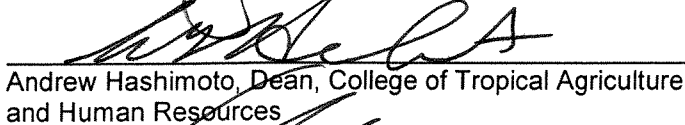
Denise Ko'nan, Chancellor

9/22/05
Date



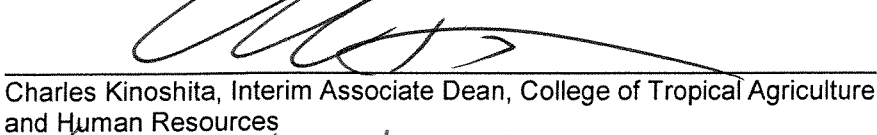
Neal Smatresk, Vice Chancellor for Academic Affairs

9/20/05
Date



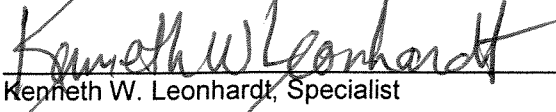
Andrew Hashimoto, Dean, College of Tropical Agriculture
and Human Resources

9/19/05
Date



Charles Kinoshita, Interim Associate Dean, College of Tropical Agriculture
and Human Resources

9/18/05
Date

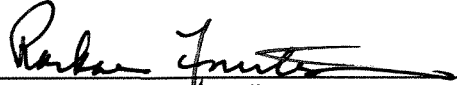
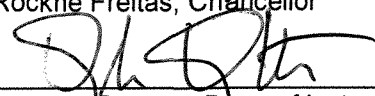
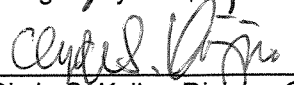
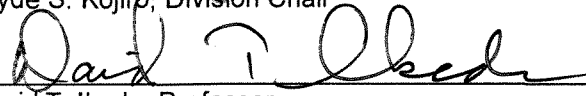


Kenneth W. Leonhardt, Specialist

14 September 2005
Date

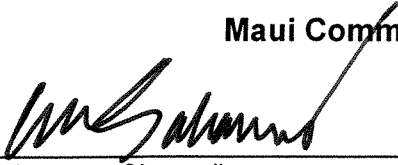
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Hawai'i Community College Signature Page


| | |
|--|------------------------|
|  _____ Rockne Freitas, Chancellor | <u>9-22-05</u> Date |
|  _____ Douglas Dykstra, Dean of Instruction | <u>9-22-05</u> Date |
|  _____ Clyde S. Kojiro, Division Chair | <u>9-14-05</u> Date |
|  _____ David T. Ikeda, Professor | <u>9/13/05</u> Date |

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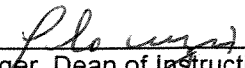
Maui Community College Signature Page



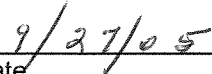
Clyde Sakamoto, Chancellor



Date



Flo Wiger, Dean of Instruction



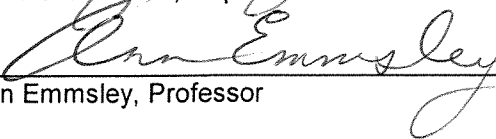
Date




Sandra Swanson, Department Chair



Date



Ann Emmsley, Professor



Date

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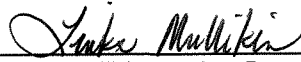
Windward Community College Signature Page



Angela Meixell, Chancellor

9/15/05

Date



Linka Mullikin, Acting Dean of Instruction

9/14/05

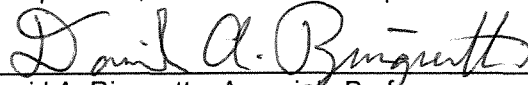
Date



Joseph Ciotti, Natural Science Department Chair

9/12/05

Date



David A. Ringuette, Associate Professor

9/12/05

Date