SYLLABUS for LABORATORY
AL-485L Tropical Fruit Horticulture
College of Natural and Applied Science
University of Guam

Instructor
Jesse P. Bamba
jbamba@triton.uog.edu
Office hours: MWF 9:00 am- 11:00 am
Office: ALS room 105c, 735-2091

Basic Information
AL-485L Tropical Fruit Horticulture
One (1) credit hour
Lab in ALS-124, Tuesday, 11:10 am to 2:05 pm

Course Description
This lab will reinforce concepts introduced in the lectures with hands-on activities and field trips to fruit farms and experiment stations. Special emphasis will be on techniques of plant propagation and flower stimulation.

Semester-Long Experiment
Using scientific methodology, students will be expected to conduct a semester-long experiment on flower stimulation in mango. Early in the semester students will apply treatments of potassium nitrate to mature mango trees to trigger flowering. At the end of the semester students will evaluate the effects of the treatments. The results will be compiled in a lab report.

Textbook/Computer Access
No textbook is required, instead students will be expected to use their computers to access online resources, such as UOG-CNAS's website for extension publications (http://cnas-re.uog.edu/#) and the online edition of 'Fruits of Warm Climates' by Julia F. Morton, 1987, Miami, Florida. (https://www.hort.purdue.edu/newcrop/morton/index.html)
Students are also expected to maintain a binder for recording data that will be used in lab reports.

Grading

A grade, separate from the lecture grade, will be awarded for the lab.

Participation	300
Lab reports	100
TOTAL	400

Points	Percentage	Grade
390-400	98-100%	A+
370-389	93-97%	A
358-369	90-92%	A-
346-357	87-89%	B+
330-345	83-86%	B
318-329	80-82%	B-
306-317	77-79%	C+
278-305	70-76%	C
238-277	60-69%	D
0-237	0-59%	F

Lab Schedule

Date	Lab #	Topic
January 25, Tuesday	Lab 1	Field Trip: Stimulate Pineapple Flowering Pineapple farm (Talofofo) UOG - Rm 124
February 01, Tuesday	Lab 2	Field Trip: Stimulate Pineapple Flowering Pineapple farm (Talofofo) UOG - Rm 124
February 08, Tuesday	Lab 3	Field Trip: Stimulate Mango Flowering #1 AES (Malojloj) UOG - Rm 124
February 15, Tuesday	Lab 4	Field Trip: Stimulate Mango Flowering #2 AES (Malojloj) UOG - Rm 124
February 22, Tuesday	Lab 5	Agriculture pests AES (Malojloj) UOG - Rm 124

March 01, Tuesday	Lab 6	Pruning Seven trees Seven Practices UOG – Rm 124 Walking tour of House #2
March 08, Tuesday	Lab 7	Mango and pineapple flower evaluation UOG - Rm 124
March 15, Tuesday	Lab 8	Plant Propagation - Asexual propagation (Grafting, Air Layering and cuttings)
March 22, Tuesday	No Class	Spring Break
March 29, Tuesday	Lab 9	Field Trip: Watermelon Farm Inarajan Field Brian L. G. - UOG - Rm 124
April 05, Tuesday	Lab 10	Field Trip: Hamamoto Fruit World Mr. Hamamoto - UOG – Rm 124
April 12, Tuesday	Lab 11	Field Trip: Banana and papaya farm (Yigo) Kenny Perez - UOG - Rm 124
April 19, Tuesday	Lab 12	Field Trip: Citrus (Dededo) AES Triton farm - UOG - Rm 124
April 26, Tuesday	Lab 13	Field Trip: Dragon fruit farm Inarajan Mr. Lui - UOG - Rm 124
May 3, Tuesday	Lab 14	Fruit preservation EFNEP UOG - Rm 124
May 10, Tuesday	Lab 15	Grower's guide oral presentation UOG - Rm 124

Student Learning Objectives (AL 485):

a. Learn the basic principles of Tropical fruit science.
b. Understand relationships of fruits trees and environments.
c. Understand basic physiological and chemical processes of fruit growth.
d. Learn basic botanical and horticultural terminology.
e. Learn basic horticultural skills of plant propagation and plant culture.

Program Learning Objectives (Tropical Agricultural Science Program):

f. Disciplinary Knowledge: Graduates apply their agricultural knowledge and skills in the production of agricultural products using best management practices and addressing locally important issues such as island pocket economies, conservation and invasive species problems. They use their knowledge and understanding of scientific concepts to diagnose and solve problems in agricultural fields.
g. Quantitative Skills: Graduates apply numerical methods in research design, financial analysis, pesticide and fertilizer application, irrigation and field setup and use computers for analysis of data and preparation of reports of results.
h. Research/laboratory skills: Graduates are competent in basic laboratory procedures and safety in the laboratory and the field. Students will develop applied thinking skills to help them formulate testable hypotheses and create effective experimental designs.
i. Communication Skills: Graduates can gather and assess evidence and use it to create effective lab and scientific reports, and oral presentations. They will develop the ability to identify, summarize and effectively communicate current issues to given audiences.
j. Technological Literacy: Graduates are competent at applying technological skills to their chosen work. They are also a competent in the use of analog and digital equipment used in modern agricultural systems. Graduates effectively judge the usefulness and appropriateness of existing and new technologies in their professional endeavors.
k. Professionalism: Graduates work effectively together in teams in laboratory, community and field settings while following ethical principles in analysis and communication. Graduates apply their gained knowledge in addressing natural resource and social issues.

Institutional Student Learning Outcomes (ILO's)

l. Effective Oral and Written Communication
m. Responsible use of Knowledge, Natural Resources, and Technology
n. An Appreciation of Arts and Sciences
o. An Interest in Personal Development and Lifelong Learning

Special Accommodations (ADA):

If you are a student with a disability who will require an accommodation(s) to participate in this course, please contact me privately to discuss your specific needs. You will need to provide me with documentation concerning your need for accommodation(s) from the EEO/ADA Office. If you have not registered with the EEO/ADA Office, you should do so immediately at 735-2244/2971/2243 (TTY) to coordinate your accommodation request.

Academic dishonesty:

All assignments and tests must be your own work..

Tobacco-free/Smoke-free campus:

UOG is a tobacco-free campus. Thank you for not using tobacco products on campus, and for helping make UOG a healthy learning and living environment.

Family Educational Rights and Privacy Act (FERPA): **link**
http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html

COVID Statement:

The University of Guam is experiencing continued disruption to delivery of instruction during the global coronavirus pandemic. The University will follow executive orders and may be forced to close again, causing more modifications as the semester progresses. All changes will be posted on the UOG website, www.uog.edu.

a. Contact OIT for technical support at 735-2630 or oit@triton.uog.edu
b. Contact the Triton Advising Center at 735 – 2271 or tac@triton.uog.edu
c. Contact Isa Psychological Services center at 735-2883 or isa@triton.uog.edu

In face-to-face courses, wearing masks and social distancing is required. Anyone who has a fever, or any other symptom, should stay home. If you do not comply with these directions, you will be asked to leave, and if you do not, class will be cancelled.
Patience, respect, and cooperation are needed from all of us to persist through these uncomfortable times.