UNIVERSITY OF Guam
College of Natural & Applied Sciences
AG-401 Community Planning
Course Syllabus-Fall 2015

Instructor: Peter R. Barcinas

Office: Agriculture Life Sciences Bldg Rm 228C
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Office Hours: By appointment

Course Title: **CF/AG-**401 Community Planning
3 Credit Hours

Course Schedule: Monday-Wednesday 1400-1520
CNAS-CYFFN RM 228

1. Course Overview:

This course is an introduction to community planning and social theories of communities with application activities designed to provide understanding of community problems and concerns, relationships of physical form to environment, function, aesthetic principles, and cultural values, planning as a synthesis of a frame of reference based on economics, political, social, cultural, physical, and administrative factors. Emphasis is on helping village communities understand the special circumstances related to growth and development pressures.

AG401 is organized into four parts with each part having a corresponding session. Part I. Sessions 1& 3 (corresponding modules), Part II. Sessions 4&5 (corresponding modules), Part III. Sessions 6&7 (corresponding modules), Part IV. Session 8.

Prerequisites: SO-101

2. Institutional Learning Objectives

- Mastery of critical thinking and problem solving
- Effective oral and written communication
- Responsible use of knowledge and technology
- Lifelong learning

3. CLS Program Learning Objectives

- Students will be able to demonstrate criterion level knowledge of family diversity in the global community
- Students will be able to demonstrate criterion level knowledge of the effects of context [social, economic, political, historical, & cultural environment] on family functioning & development
- Students will be able to demonstrate critical thinking skills and problem solving abilities; demonstrate criterion level knowledge of family diversity in the global community; demonstrate research skills
- Students will be able to demonstrate oral communication skills, basic research skills, technological skills, critical and problem solving skills
- Students will be able to apply knowledge and professional skills to address issues encountered in professional settings; demonstrate written and oral communication skills, basic research skills, technological skills, critical and problem solving skills; demonstrate ability to gather and synthesize information

4. Student Learning Objectives:

Upon successful completion of this course, students should be able to:

- Community Planning Processes
  - SLO-1: Understand the community planning process and fundamentals.
- Community Information
  - SLO-2: Analyze and interpret information about communities.
- Community Planning Concepts and Tools
  - SLO-3: Apply, use, and demonstrate the use of various planning concepts, approaches, planning tools not limited to the following i.e. Strategic Planning, Community Capitals Framework in understanding community planning issues
- Community Resources and Assets
  - SLO-4: Identify, appraise, assess and use the various community resources, assets available for planning
- Planning Scenarios and Applications related to Immersion in community development and planning
  - SLO-5: Develop mini-plan documents following planning processes based on community planning issues. Apply planning approaches to solve community planning challenges

5. Course Format:

This course is designed to provide the student with an understanding of the context of community development and planning, needs assessment and sourcing community assets and resources. The course format includes the use of session lectures, module based assignments, community application project, guest lectures external

collaborators, field activities, presentations, and other educational activities. Session activities will be supported by selected required readings. Students will be required to actively participate in all posted Moodle assignments, discussions and in-class activities and discussions. Weekly discussion threads will be provided via the course Moodle site. Students are responsible for the regular and active participation both in-class discussions and assignment posting.

6. Required Texts and Course Materials:

Selected readings: (With associated copying charges) will be provided. To a limited degree, these readings will be negotiated between instructor and class participants. Reading materials and resources will be listed in the upcoming course sessions and may be amended as needed. This will include a collection of articles, chapters and supplemental references, recent journal articles, research will be provided during class time or on the course Moodle session and weekly assignments and discussions:

Course Book Reference:

Kelly, E. D. (2004). *Managing community growth*. Greenwood Publishing Group.

Hoch, C. (1994). *What planners do: Power, politics, and persuasion*. American Planning Association.

Supplemental Material:

Guam GovGuam website links:

1. 2010 Census of Population and Housing
   http://bsp3.guam.gov/planning-information-program/census-of-population-and-housing/2010-census-of-population-and-housing/

2. Comprehensive Economic Development Strategy (CEDS)
   http://bsp3.guam.gov/socio-economic-planning-program/comprehensive-economic-development-strategy-ceds/

7. Course Requirements:

Attendance and participation in the class discussions, Moodle weekly forum discussions will be required as part of the active participation grading rubric. Not doing so will make a passing grade unlikely. At the discretion of the instructor, bonus points will be awarded to students for seminar/public hearings, community forums and participation in community forums and presentations. The bonus points will be used to enhance the total points earned.

Course assignments: The assignments for AG 401consist of readings from selected course materials, and online sources, journals and reports, and includes instructor lecture/discussion notes. Students are expected to respond to questions about the readings, in-class assignments and Moodle posted assignments and discussions. You will be expected to write short essays in response to questions and assignments posed by the instructor. You will critique articles, and comment on other student's posting or writings. Remember this is an upper level coursework. Session assignments will provide for the weekly class activities that will require posting to the classroom Moodle. Essays posted to the instructor and to the course site should be between at a minimum of 300 -500 words unless otherwise noted. Be sure to check spelling, grammar, APA style, and be sure your name appears on the paper.

Activity assignments will be assigned weekly*.

Assignment papers: Session essay assignments will be due. The papers will provide the opportunity to explore and investigate a specific community planning issue and or resource related to the session topics covered during the course. **The papers are due on the specified due date (will be announced).**

Group/Class Project: During the semester, a class project will be allocated to support lecture topics. Each student or student pair will select a community planning or research theme.

Preferred Methods for Delivering Assignments:
All assignments and essay papers are to be submitted during the stated due date. All assignments should be uploaded to the course Moodle assignment link.

Class Presentation: Based on your approved project (see final session 8). If you opt to work in teams, a minimum of two members will develop a presentation based on a planning topic area of interest. The presentation should indicate how the subject area relates to community planning discussions and course discussions. Development of this project will be discussed during each of the phases.

8. Policies on Late Assignments:

Assignments are to be completed and submitted by the posted due date or as announced; unexcused late submittals are subject to the following penalty:

- Papers or assignments up to one week late will be accepted and receive partial credit or three-fourths credit or as specified in the Moodle course site.
- Papers up to two weeks late will receive one-half credit
- Work submitted more than two weeks late receives no credit

9. UOG DISABILITIES POLICY

In accordance with the Americans with Disabilities Act (ADA) of 1990 and the Rehabilitation Act of 1973, the University of Guam does not discriminate against students and applicants on the basis of disability in the administration of its educational and other programs. The University offers reasonable accommodations for a student or applicant who is otherwise qualified, if the accommodation is reasonable, effective and will not alter a fundamental aspect of the University's program nor will otherwise impose an undue hardship on the University, and/or there are not equivalent alternatives. Students are expected to make timely requests for accommodations using procedure described at: www.uog.edu/eeo/PolicyDisability.pdf. If appropriate, the University may choose to consult with such individuals, at or outside the University, to provide expertise needed to evaluate the request for accommodation. *Each student bears the responsibility for initiating and then documenting a disability-related request for accommodation in the manner requested in this Policy.*

Special Needs:

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. Contact them at 735-2243(TTY)/2244/2971 to coordinate your accommodation request. [*full text at: www.uog.edu/eeo/PolicyDisability.pdf]

10. Grading Criteria and Components of Course Grading:

Course grades will be based on participation and completion of the following sections listed below. For a passing grade students must obtain 70% or higher.

Weekly Assignments and Discussions/In-class Activities	30%
Session modules	25%
Forum/Moodle	10%
Exams	25%
Attendance	10%
Total	**100%**

A	90-100 points
B	80-89 points
C	70-79 points
D	60-69 points
F	Below

Participation/Communication Requirements:

Students are required to participate during class session days and posted forum discussions. This includes posting materials and contributions to assigned discussions. Topics to be discussed are provided in the weekly assignment Moodle WK profiles*. Postings and comments are relevant to the session materials, discussions, readings, and information obtained from other sources. Students should submit at a minimum two substantive postings each week.

11. Course Outline (Refer to CF/AG401 Course Schedule Outline)

Plant Disease Clinic & Lab
AL423/L Syllabus

AL423/L	TBD	
Instructor:	Andrea L. Blas	
Office: ALS rm. 217	**Phone:** 735-2140	ablas@triton.uog.edu
Office Hours:	[insert instructor office hours]	

Course Catalog Description

AL423/L Plant Disease Clinic & Laboratory (3 & 1 credits) **As Resources Permit**

This course expands on the content knowledge and laboratory techniques introduced in AL323/L by focusing on diagnosis, management and epidemiology of local plant diseases. In the laboratory section, students develop archival collections of local plant disease specimens and work to confirm pathogen identity. The course meets for three hours of lecture and three hours of lab weekly. Concurrent enrollment in AL423 and AL423L required.

Prerequisites: AL323/L or consent of instructor.

Course Content - Lecture

I. Plant disease in the Pacific Islands
   A. The Disease Triangle
   B. Arrival of plants and their pathogens
   C. Traditional disease management practices
   D. Quarantine and Biocontrol programs
II. Diseases of traditional & cultural food crops
III. Diseases of tropical fruit trees
IV. Diseases of important vegetable crops
V. Future directions in management and research in tropical plant disease

Student learning objectives - Lecture

- Develop critical thinking and analytical skills in disease diagnosis and management options.
- Apply content knowledge from Global and Regional Studies to applied agricultural problems.
- Develop familiarity and understanding of locally-important plant diseases and their management.
- Gather, assess and present information to create effective archival-type collections of local plant disease specimens.

Student learning objectives - Lab

- Apply critical thinking and analytical skills in diagnosis and identification of plant diseases and their causal agents.
- Apply appropriate safety measures and aseptic technique to laboratory protocols for handling plant disease specimens.
- Develop familiarity and understanding of serological and molecular diagnostic tests.
- Gather, assess and present information to create effective archival-type collections of local plant disease specimens.

Evaluation and Grades

Grades for the lecture and lab sections are assigned independently of each other. It is possible to pass the lecture section (AL423) and simultaneously receive a failing grade in the laboratory section (AL423L) or vice versa. Students will be assessed through a combination of exams (written and practical), quizzes, various writing assignments and prepared extension- or archive-type documents.

***Note that Attendance is not required however Participation, in lab exercises and group discussions, is a graded component for the course.**

AL423 – Lecture Section		AL423L – Lab Section	
Evaluation Method	**% of grade**	**Evaluation Method**	**% of grade**
Exams (2)	20%	Specimen collection	30%
Quizzes (10)	20%	Lab practica (exams)	20%
Writing assignments (5)	25%	Lab notebook	20%
Plant disease factsheets (5)	25%	Protocol write-ups	15%
Focus notecards	5%	Safe laboratory practices	10%
Participation	5%	Participation	5%
Grading Scale (Lecture & Lab): A ≥ 90%; B 80-89%; C 70-79%; D 60-69%; F < 60%			

Required texts

none

ALS Program Learning Objectives (PLOs)

PLO1 - Disciplinary Knowledge and Skills: Graduates will demonstrate integrated knowledge in their chosen fields of study and related sciences.

PLO2 - Research Skills: Graduates possess critical thinking and analytical skills. Graduates are competent in basic procedures and safety protocols in conducting research. Graduates can use their knowledge and understanding of scientific concepts to explain and solve problems in their field.

PLO3 - Analytical Skills: Graduates can apply quantitative and/or qualitative analytical methods in agriculture and the life sciences.

PLO4 - Communication Skills: Graduates can gather and assess information and use it to create effective research and outreach communication media and oral presentations.

PLO5 - Ethics and Professionalism: Graduates understand the ethical principles underlying research, publication, and professional behavior. Graduates can demonstrate teamwork and networking skills, and understand the importance of providing correct credit for others' work.

PLO6 - Multicultural Competence: Graduates will develop cross-cultural respect and a foundation for lifelong multicultural competence.

PLO7 - Lifelong Learning and Integration of Knowledge from the Sciences and the Arts: Graduates can empower themselves through life-long learning to enhance their knowledge base, and demonstrate an ability to integrate knowledge from the sciences and the arts.

UOG Institutional Student Learning Objectives (ILOs)

For more information about the following ILOs, please refer to www.uog.edu/adminstration/academic-and-student-affairs/accreditation/assessment-and-program-review.

- Mastery of critical thinking and problem solving
- Mastery of quantitative analysis
- Effective oral and written communication
- Understanding and appreciation of culturally diverse people, ideas and values in a democratic context
- Responsible use of knowledge, natural resources, and technology
- An appreciation of the arts and sciences
- An interest in personal development and lifelong learning

Academic Integrity Policy

Academic Integrity is about performing in your role as student in ways that are honest, trustworthy, respectful, responsible, and fair (see www.academicintegrity.org for more information). As a student, you will complete your academic assignments in the manner expected by the instructor. Academic dishonesty, including but not limited to cheating and plagiarism may result in suspension or expulsion from the University. Refer to the UOG Student Handbook and Code of Conduct for more information.

Tobacco Policy

The University of Guam is a tobacco-free campus and has a total ban on sales, smoking, distribution and use of tobacco and tobacco-based products on campus. UOG is committed to promoting the health, wellness and social well-being of the University Community, the people of Guam and the Western Pacific.

Special Needs (EEO/ADA)

If you are a student with a disability who will require an accommodation 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 from the EEO/ADA Office. If you have not registered with EEO/ADA Office, you should do so immediately at 735-2244/2971/2243 (TTY) to coordinate your accommodation request.

[Tentative] Course and Lab Schedule

Week	Lecture Content	Lab Activity/Exercise
01	Course overview, syllabus.	Lab safety; pre-assessment of aseptic technique and basic lab protocols.
02	Plant disease in the Pacific Islands.	Aseptic technique and culture media preparation.
03	Diseases of traditional & cultural food crops.	Field collection of disease specimens and processing.
04		Plant disease diagnosis and identification.
05		
06		
07		**<< Lab Practicum 1 >>**
08	**<< Mid-term Exam >>**	Serological and molecular diagnostic testing protocols.
09	Diseases of tropical fruit trees.	
10		
11		
12	Diseases of important vegetable crops.	
13		**<< Lab Practicum 2>>**
14		Specimen collection – final preparation.
15	Future directions	Specimen collection – presentation and peer-review.
Final Exam for AL423 Lecture Section – refer to UOG schedule of classes.		

Spring 2012

Scientific Photography

Course Description

Photography is one of the primary means through which scientific observation and research is documented and presented to colleagues and the public. By developing technical observational and aesthetic skills, students will learn how to extract relevant information from nature using macro-photography, photomicrography, special techniques and digital processing. Students will learn the basics of photography and the use of a computer as the digital darkroom. This course includes three hours of lecture and three hours of laboratory; weekly. Laboratories will either be field activities or hands-on experience in the classroom and through Moodle.

Instructor

James McConnell
College of Natural and Applied Science Rm. 317
Phone: 735-2129 Cell: 486-4752
email: mcconnel@uguam.uog.edu
Office hours: Please submit questions through Moodle or arrange time in class.

Learning Objectives

After completing this course students will be able to:

1. Demonstrate the ability to use various cameras and upload, evaluate and process images.
2. Merge and process digital images to enhance focus and interactivity.
3. Given a choice of lenses, the student will be able to select an appropriate focal length to communicate theirs ideas.
4. Student will be able to choose the appropriate shutter speed, aperture and ISO to communicate desired idea.
5. Given a photograph, the student will be able to articulate criticism regarding the image and evaluate its quality.
6. Use lighting techniques and post-processing to enhance images to optimize desired image information.

7. Retouch an image to enhance specific objects in the image using the ethical considerations of publishing images in scientific literature.

Moodle

News and any info on the course is on this page. The syllabus will be available for download from this page. Students are expected to check this site for announcements and any updates on the course. Some assignments will be submitted to Moodle into forums for discussion among the students.

Getting Stared with Moodle

To get to the class page, do the following:
Go to the UOG Moodle site (http://campus.uogdistance.com/). On this page, select College of Natural and Applied Science/Tropical Agricultural Science. Then choose the AG430 link. You will need a key for the class. It is **ag430spring**.

Photography Log

You will be expected to keep a log of your photographic activities. You will need to log:

1. Time of Day
2. Location and site description
3. Assignment Objective
4. Camera settings
5. Other information relative to shooting or processing

Much of this information can be obtained from your photographs when viewed in Lightroom, Aperture or other Digital Asset Manager

Grading

Students will be expected to attend and participate in scheduled class activities. Photos will be submitted and critiqued in class and in Moodle forums, by students. Participation will be evaluated for part of your grade. Students' images will be submitted before the start of lecture. The students name and shoot date should be in the folder name. A new folder will be needed for each assignment. Projects will include giving a presentation and preparing a poster and other print media. Grading will em-

phasize the student's progress in developing photographic skills used in scientific documentation. Your photographs should be for documentation. Creative manipulation of images is not appropriate to the photography covered in this course.

Activity	Percent
Shoot Submittals	20%
Photography Log	10%
Oral Presentation of Portfolio Photos	5%
Poster Presentation (Digital Submittal)	15%
Fact Sheet Submittal	10%
Portfolio 1	15%
Portfolio 2	15%
Class Participation in Discussion and Forums	10%

Required Text

There will be assigned readings to do in ALS 317

Cameras

A basic point and shoot with close focus and some manual features will be okay for the start of the course, but you will need to use other cameras to complete all of the required assignments. You will be expected to have read the manual and know how to operate your camera and change the settings. The most suitable cameras for this course are digital SLRs. Many of you do not have these. Cameras and lenses will be available for short-term loan from the instructor. Arrangements can be made with the instructor for borrowing equipment. Always have your camera with you with charged batteries for class and labs. Be prepared to shoot during any class time.

Course Schedule

Lectures and labs will include the following topics. The emphasis of the subjects will vary depending upon the interests of the students and will be announced as the course progresses.		
Ethics	Photomicrography	Tubes
Buying a camera system	Controlling reflections	Zoological subjects
Editing and Processing	Motion control	Photoshop
Exposure overview	Spherical and cylindrical objects	Scanners
Depth of field and Aperture	Black objects	Aerials
Shutter speed	Hairs and hairlike processes	Caves
Light	Lab Apparatus and Equipment	Shooting in the Laboratory
Filters	Art and Anthropological Objects	Specimens
Lenses	Copying and scanning documents	Backgrounds
Composition	Botanical subjects	Fossils
Close-ups	Dish Cultures	Geological Specimens
Insects	People	Lighting

Portfolios

Two portfolios will be submitted during the semester. Portfolio 1 will be due March 13. The poster display of Portfolio 2 will be due May 11. The first portfolio will be submitted electronically. Portfolio 2 will be submitted both electronically and as a printed display. The subject or theme of the Portfolio 1 must be submitted by February 9 and Portfolio 2 by April 5. The subject should be organisms within a family or species that you are interested in. You will conduct a photographic study, shooting the subject at different focal lengths producing a collection of photos that document or describe the characteristics of the subject. A theme would include photos of various subjects using specific shooting techniques such as close-ups or flower photography or fish photography. The objec-

tive is to demonstrate, with the portfolios, that you have developed an expertise in your photography. The portfolio subjects or themes must be approved by the instructor prior to submitting the portfolio. Failure to get the subject approved will result in rejection of the Portfolio. Work on the Portfolios before the deadlines to resolved unexpected problems. Photographs for portfolios will be submitted in electronic form for critique in Wednesday sessions of lecture and lab.

Computer and Software

You will be expected to have access to a computer. A laptop is recommended so that you can bring it to class. You will need to have a copy of Photoshop CS5 installed on the computer for later in the semester. You can download a demo copy from www. adobe.com. Other software may be recommended for you to download and install.

Optional Shoots

During the semester, optional shoots may be scheduled. The shoots are for the students to gain experience using various cameras, in the field and lab. The shoots are opportunities to work on assignments and are not substitutes for the labs. You should be prepared to be in the sun for several hours--dress appropriately. You may also want drinking water, etc.

Reading Materials

Readings in various books will be assigned. Copies of the text and additional reading materials will be available in ALS 317. In addition there are numerous books to browse. Please utilize these resources.

Drop Dates

University policy sets the drop dates. You can withdraw from classes "voluntarily" during the semester and as late as the end of the semester with my signature on a withdrawal form.

Student Workload

Students will be expected to complete assigned readings. Student are required to attend the lectures and labs and participate in discussions during critiques. This course does require frequent submissions of photographs and preparation of two portfolios, and oral and poster presentations. You will be expected to keep a diary that logs your photographic settings and techniques. To prepare these assignments, a good deal of time will need

to be allocated for photographing subjects. Many classes will be for reviewing images shot for the current assignment. Students will be expected to have the selected images on a flash drive so that the images can be moved to the instructor's computer for projection for the class to critique.

Other Requirements

1. Students are expected to not use cellphones during class.
2. Students are required to attend and participate in lectures and labs.
3. Students are not permitted to browse the internet nor send text messages or email during class unless it is a class activity.
4. Images for assignments must be submitted before the start of class.

AG 451 Fall 2013
(Draft modification on grading and readings may be added)
Dr. L. Robert Barber, Jr. A.K.A. Bob Barber
bbarber@uguam.uog.edu
Office Numbers (671) 735-2080 or 2050 (admin. assist.), 735-2093(staff) or 735-2087 (answering machine)
Cell: (671) 787-7391 Home: 734-2281
Office hours: To be determined by class or by appointment

Objectives
Through assigned readings, discussion, presentations, written outlines, reflection papers, field (farming and marketing) experiences, and written reports the course attempts to provide the student with a broad understanding of agriculture, natural resource conservation within the context of personal and farm financial management and planning. The goal, simply stated, is to provide the student with a roadmap that can be personalized into a plan for farm management and wealth accumulation, while building on the natural resource base underlying the farm. An interesting challenge for this course is meeting these objectives through a distance education/hybrid course venue.

The student will obtain experience in hands on farming/gardening, soil and water conservation and agricultural marketing as well as touch on core personal financial management concepts which are critical for successful wealth building (also needed to keep personal financial life from destroying the farm business viability). This will provide a relative (will affect the grade, so some risk) risk free method of exploring various farm management strategies. Outside of class coverage of specific production practices (through 4 gardening modules & several marketing activities), evidence of individual application will be required.

The student will also be expected to engage in actual field work (farming, soil and water conservation, financial management, and marketing) practicing/demonstrating course concepts. Completion and documentation of these activities is critical to the students' final grade. For many of these activities digital photos will be required (student will need access to a digital camera of some form). Not taking these activities seriously and completing them in a timely manner has, to past students' dismay, resulted in significantly lowered final grades.
Instructor's note/warning:
Portions of this subject matter are of a very personnel nature, to have an impact we must examine and apply it to our personal lives. In this area I try to practice assigned investment *what I teach and will share experiences and data from my personal financial life. In many of the assignments you will have to put aspects of your financial life onto paper in order to understand and use the forms and processes (since it is for class simulation purposes you may delete or embellish to protect your private world without penalty) the key is that you practice the exercise, understand the data gathering, analysis and its implications and then develop experience in adapting behavior based on this information. Except for a few group activities only you and the instructor will see this information but completing these task are course requirements.*

Course Intended Student Learning Outcomes*:(note get from Jim and update) CFS 351 currently here as place holder*

1. As a result of taking this course the learner should be able to explain; key steps necessary for a 20 year plan to build wealth, identify personal behaviors that support this plan and those that detract from the plan, be able to describe the role of forced regular savings, methods of implementing savings, the latte factor, emergency funds, retirement funds and tax advantaged

accounts. This basic understanding of personal finance will be the foundation to build a understanding of money management in an agricultural business.

2. The student will demonstrate the ability to articulate key components of a farm plan from values identification, to short and long term goals, to resource mapping, to production plan to a marketing plan and finally to use these parts to write an executive summary.
3. Students will demonstrate the ability to grow a crop.
4. As a result of taking this course the learner will increase their ability to read complex chapters of conceptually new material, identify key points in readings, and write concise summaries of this material.
5. As a result of taking this course the learner will increase her/his ability to identify and present to the class key points from the reading material or from investigations in supplemental materials (both written and verbal from subject experts).
6. As a result of taking this course the learners will increase their ability to take a body of information, identify key points, and communicate these points. But, more important, the learner must then engage in reflection on their own behaviors and life situation and describe how this information applies to them; both in their present and future situations. Guided by this reflection, they should demonstrate the beginning steps in developing a farm business plan.
7. Through course reading and discussions the learners should increase their sense of empowerment and belief they can engage in both subsistence and commercial agricultural production and be able to articulate a step by step plan to do so both in verbally and in writing.

Agriculture and Life Sciences Program Learning Outcomes

Program Learning Outcome 1, Disciplinary Knowledge and Skills: Graduates will demonstrate integrated knowledge in their chosen fields of study and the related sciences.
Program Learning Outcome 2, Research Skills: Graduates possess critical thinking and analytical skills. Graduates are competent in basic procedures and safety protocols in conducting research. Graduates can use their knowledge and understanding of scientific concepts to explain and solve problems in their field.
Program Learning Outcome 3, Analytical Skills: Graduates can apply quantitative and/or qualitative analytical methods in agriculture and the life sciences.
Program Learning Outcome 4, Communication Skills: Graduates can gather and assess information and use it to create effective research and outreach communication media and oral presentations.
Program Learning Outcome 5, Ethics and Professionalism: Graduates understand the ethical principles underlying research, publication, and professional behavior. Graduates can demonstrate teamwork and networking skills, and understand the importance of providing correct credit for others' work.
Program Learning Outcome 6, Multicultural Competence: Graduates will develop cross-cultural respect and a foundation for life-long multicultural competence.
Program Learning Outome 7, Life-Long Learning and Integration of Knowledge from the Sciences and the Arts: Graduates can empower themselves through life-long learning to enhance their knowledge base, and demonstrate an ability to integrate knowledge from the sciences and the arts.

UOG Expected Institutional Student Leaning Outcomes (December 2008; Faculty Senate-Endorsed Core Statements and Clarifying Statements Added April 2015):
A University of Guam student will have demonstrated upon completion of any degree are:
ILO 1: Mastery of critical thinking and problem solving
ILO 2: Mastery of quantitative analysis
ILO 3: Effective oral and Written communication
ILO 4: Understanding and appreciation of culturally diverse people, ideas ad values in democratic context

ILO 5: Responsible use of knowledge, natural resources, and technology
ILO 6: An appreciation of arts and sciences
ILO 7: An interest in personal development and lifelong learning

Requirements Text and Other:

The Automatic Millionaire, David Bach, very inexpensive may be purchased from UOG CES administration support office (Elaine or Jane) or ordered new or used from Amazon and other online book vendors, a copy will be on 2 hr. reserve in Library

*California SmallFarms Handbook***,**

Other Publications and Media from David Bach's http://www.finishrich.com/ webpage

*Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses***,** Gigi Di Giacomo, Robert King, and Dale Nordquist, (2003). Minnesota Institute for Sustainable Agriculture . May be downloaded and printed for free at:
http://www.sare.org/Learning-Center/Books

Local Harvest: A Multifarm CSA Handbook, Jill Perry & Scott Franzblau, (2010). Northeast Sustainable Agriculture Research and Education (NESARE) program. May be downloaded and printed for free at:
http://www.sare.org/Learning-Center/Books

Costs (Important Concepts in Understanding Production Costs), Bob Barber, John Brown & Vic Artero (1999). University of Guam Cooperative Extension Service. May be downloaded and printed for free at:
http://university.uog.edu/cals/people/

Developing Budgets, Bob Barber (1999).University of Guam Cooperative Extensions Service. May be downloaded and printed for free at:
http://university.uog.edu/cals/people/

Setting and Achieving Financial Goals, Etta Mae Westbrook, The University of Tennessee Agricultural Extension Service.

(*Develop more*) eXtension Financial/Farm Management Websites (financial sheets), Developing Budgets (PEOPLE), UOG New Farmer Curriculum, California Direct Marketing Materials.

Partial Supplemental Readings List (to be expanded):
The Automatic Millionaire Workbook, David Bach, (2005). Broadway Books, New York. (will be on reserve in the library)

Basic Introductory Gardening Curriculum (4 workshop modules), assembled and formatted for UOG CES New Farmer Program/Children Healthy Living Grant.

*UF/IFAS Farm Pocket Notebook: For records and in-field reference,*Larry Halsey, editor, Jefferson County Extension Director, Jim DeValerio, Bradford County Extension Agent, Jed Dillard, Jefferson

County Extension Agent, Steve Gaul, Nassau County Extension Agent, Dr. Richard Sprenkel, NFREC-Quincy, IPM Specialist, Dr. Danielle Treadwell, Horticulture Sciences, Organic Specialist (edited in 1989). May be downloaded and printed for free at: **http://smallfarms.ifas.ufl.edu**

Sustainable Farms, Ranches and Communities
Federal Programs for Sustainable Agriculture, Forestry, Entrepreneurship, Conservation and Community Development

Kansas Balance Sheet pub
http://www.ksre.ksu.edu/library/agec2/mf291.pdf

Kansas Income Statement pub
http://www.ksre.ksu.edu/library/agec2/MF294.pdf

Kansas Visioning/Goal Setting pub
http://www.ksre.ksu.edu/library/agec2/mf2695.pdf

Permaculture Essence
http://www.holmgren.com.au/DLFiles/PDFs/Essence_of_PC_eBook.pdf

Agroforestry Overview
http://ucanr.org/sites/placernevadasmallfarms/files/76323.pdf

http://www.agmrc.org/media/cms/agrofor_A18CE08578D41.pdf

Will More Add by Lecture
Notes and Thoughts:

- ✓ The different readings will present different and occasionally opposing views on the same material. Lecture notes will reflect the view of that lecture's assigned readings, not necessarily the instructors but often influenced by the instructor's perspective.
- ✓ There will be supplemental readings and audio tapes from a number of sources either handouts, web materials or materials on reserve in the Library.
- ✓ Each student will be required to maintain an email account and regularly log on the Internet for course activities.

This course expects the student completing all the reading assignments in addition to listening to the lectures. The class meets twice a week and the lab once a week. This will require self-discipline on the students' part. Completion of the readings is essential for class participation and therefore a passing grade. The readings are not difficult to understand but there is a large volume. The student will be expected to discuss/explain/present the reading material assigned for each class and/or submit a written outline or reflection on the material and/or answer forum questions or take a quiz. These efforts will constitute a portion of the student's grade. It is generally assumed by this professor that students should put in 2-3 hours beyond listening to the lecture for each class at a minimum.

Assignments will be due within the timeframe set, access to submit may be limited after this the assigned point. One may expect a required quiz or essay exam when you do not submit outlines, focus questions, forum exercises, or reflection papers as assigned. One course activity will be to have students identify relevant supplemental readings through the development of a webliography.

Where available the class will utilize online resources for assigned readings. The course also strives to identify printed materials that are inexpensive to keep student costs down. Given this it is expected that the student obtain promptly and read the assigned materials do not wait until the week of the assignment to order the books. Order during the first week of class or sooner.

Influenza H1n1 Alert Notice To Students:

Based on the new CDC guidance, the Department of Public Health and Social Services recommends that people with influenza-like illness should stay home for 3-5 days or 24 hours after their fever is gone without the use of fever-reducing medicine, whichever is longer (fever is defined as having a temperature of 100 degrees Fahrenheit or 37.8 degrees Celsius or greater. If you feel ill with flu-like symptoms please stay home and contact me by phone or email. We will arrange to accommodate your absence by assigning work to be completed at home. Please refer to the H1N1 alert notices posted across the campus.

Grading:

55% Exams at least 3 with one a comprehensive final
5% Attendance and Participation (frequency and quality)
15% Presentations and write up and success of field activities
15% Outlines/Reflections of reading assignments, forums, and focus questions/quizzes.
10% Student farm plan and planning write up/explanation.

Special Needs:

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. If you have special needs in order to appropriately address them I must be notified. 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. Contact them at 735-2243(TTY)/2244/2971 to coordinate your accommodation request.

[*full text at: www.uog.edu/eeo/PolicyDisability.pdf]

Date or Lecture	Subject	Readings & Assignments (must be completed by beginning of class)
Learning to Manage Oneself for Wealth Accumulation (Get your personal act together before trying to get a business together)		
1 & 2	Course Overview & Drop Add	Purchase books (order from Amazon or other online vendor) or in ALS Rm 228 from Jane. Read before class 'The Automatic Millionaire' (AM) pgs. 1-56 up to the end of Chapter 2. Start Latte Factor assignment for 1 week
3	The Latte Factor	Submit outline of Chapter 2 Send Instructor an email to provide email address. Continue one week Latte Factor assignment.
4	Review Latte Factor Pay Yourself First,	Read 'The Automatic Millionaire' pgs. 57-78 up to the end of Chapter 3. Submit Outline for Chap. 3 Latte Factor: Submit one week of expense tracking.
5	Pay Yourself First, (cont.), Make it Automatic	Have Read all of Chapter 4
6	Make it Automatic (cont.), Automate for a Rainy Day	Read before class 'The Automatic Millionaire pgs. 134-158. Chapter 5
7	Automate for a Rainy Day (cont.), Financial Statements (NetWorth &Monthly Income/Expense)	*Need to find a good Extension publication*
8	Financial Statements (cont.), Reflection and Values Assessment	Read "Determine the true purpose of money in your life" & "Setting and Achieving Financial Goals"
9	Exam Review and Online Resource (webliography) compilation.	
10	Exam	
Farm/Agricultural Planning and Management		
11	Introduction and Values Identification	Read "Building a Sustainable Business" (BSB) pages 12 through 25. Draft answers to worksheets
12	Four Alternative Philosophies in Agricultural Production.	Find online an Extension publication that summarizes concepts involved in one of : Organic Production, Permaculture, Agroforestry, or Sustainable Agriculture. Read it and post a summary with link to the article on the forum.
13	Farm and Current Situation	Read BSB pages 27 to 46
14	Farm and Current Situation (cont.) (Financial statements)	Read BSB pages 46 to 66
15	Developing the Physical Site Map & Plan: Conservation Plan	Submit your completed plan worksheets *(obtain NRCS publication to guide)*
16	Vision, Mission, Goals	Read BSB pages 87 to 96

17	Preliminary Market Strategy	Read BSB pages 103 to 134
18	Production Strategy/Plan	Read BSB pages 134 to 144 Update conservation plan with production information.
19	Human Resources Strategy/Plan	Read BSB pages 145 to 154 Update conservation plan with labor information.
20	Financial Resources Strategy/Plan	Read BSB pages 154 to 164 Update conservation plan with financial information.
21	Costs and Enterprise Budgets	Read Developing Budgets and Costs Publications
22	Review and Reflection	Discussion on how each student will develop their farm plan. Discuss student questions for Exam Review
23	Exam II	
Direct Marketing and Community Supported Agriculture		
24	What is a multi-farm CSA and its benefits	Read Local Harvest pages (LH) 15-34 (skim earlier pages) Prepare an outline of these materials.
25	Multi-Farm CSA Organization	Read and outline LH pages 35-48
26	Production Management (Crops and Bids)	Read and outline LH pages 49-67
27	Multi-Farm CSA legal issues	Read and outline LH pages 68-78
28	Other Direct Marketing Alternatives (pick your own and fee fishing)	Read Pick Your Own & Fee Fishing Extension Publications
29	Thanksgiving holiday	Time to really catch up on your readings
30	Other Direct Marketing Alternatives (Roadside stands and Farmers Markets)	Read Roadside Stand and Farmers Markets Extension Publications
31	Home Deliveries	Readings to be determined
32	Last Class	Review for Final
Final Exam	Comprehensive Final	

COLLEGE OF NATURAL AND APPLIED SCIENCES
AG481/G - ENVIRONMENTAL SOIL SCIENCES

Course Syllabus for Spring Semester 2015

INSTRUCTION INFORMATION:

Instructor: M.H. Golabi, PhD, Soil and Environmental Scientist
Contact Info: Phone: 735-2134/2100, e-mail: mgolabi@uguam.uog.edu

Office hours: Tue, Thurs: 11:00am -12:00

Lecture Schedule: Tuesday, Thursday (9:30am -10:50am)
Class room: CNAS- 125B
Lab Sessions: Soil Labs (302) - Thursday: 1:30-4:30pm

COURSE DESCRIPTION:
This course discusses the environmental aspect of soil sciences. The course outlines the basic processes of soil erosion and sedimentation and gives an overview of management effects for sedimentation mitigation and for erosion control including soil and water conservation techniques. Use of compost as soil quality enhancement for erosion control and soil sustainability will be discussed. This course also discusses non-point source pollution and control practices including bioremediation of contaminated soils involving disposal of organic wastes on agricultural and forestlands. The course also briefly discusses the watershed management and parameter measurement related to watershed management.

COURSE OBJECTIVES AND GOALS
This course will equip students with skill for environmental assessment and soil and water contaminants measuring techniques and analysis. Students will be able to learn the techniques that are used for bioremediation of contaminated soils and learn how soil can be managed to filter out contaminants before they reach the groundwater.

COURSE REQUIREMENTS:
The students of EV 481/G should possess a basic knowledge of soil principals and characteristics such as chemical, physical and biological properties of soils. The students taking this course should also possess a basic knowledge of math and chemistry and environmental biology. College algebra, pre-calculus and/or any introductory math course should provide the students with basic math requirement for this course. A general chemistry courses such CH102/CH102L and environmental biology (BI 100) should provide necessary chemistry and biology background for the students of this course. Since the aforementioned courses are the pre-requisite for the AG/NS 380 (principal of soil science) therefore the students who take AG 380 should already be equipped with an appropriate background for this course.

TEACHING METHODOLOGY:

This course is taught in lecture format; however, a lab section is designed to provide students with practical learning experience. Additional background materials for the class are occasionally obtained from journal articles and books on the various subject covered in this course. In addition to a textbook additional reading material will be provided by the instructor.

RECOMMENDED TEXTS AND/OR STUDY GUIDES

Students may seek the following books:

1. Fergus, I.F., and K. J., Coughlan (eds). 1993. Environmental Soil Science (The Main Textbook).

2. Biggs, A.J.W. (ed). 2005. Understanding Soils and their interactions with land management. Aust. Soc. Of Soil Sci (Queens land Branch).

3. Hillel, Daniel. 1998. Environmental Soil Physics. Academic Press, San Diego, CA

4. Ritter, W.F., and A.Shirmohammadi. 2000. Agricultural Nonpoint Source Pollution. Lewis Publishers. New York

5. Winegardner, D. L. 1996. An Introduction to Soils for Environmental Professionals

6. Lick, Wilbert. 2009. Sediment and Contaminant Transport in Surface Waters.

7. Hemond H. F., and E. J. Fechner. 19994. Chemical Fate and Transport in the Environment. Academic Press. New York

8. American Society of Agricultural Engineering (ASAE), 1995. Water Quality Modeling. ASAE Publication. ASAE, St. Joseph, MI

9. Kostecki, P. J., E.J. Calabrese, and M. Monazountas. 1997. Contaminated Soils, Vol II. Amherst Scientific Publishers. Amherst, Massachusetts

SUPPLEMENTAL READING LIST:

In addition to the above books, you will be provided with complete lecture notes that will be used as your main source of study material. Also, there will be occasional handouts and related materials to supplement the lecture notes. Lecture notes will be compiled from the textbooks as well as the books listed below and from the numerous professional journal articles published on the subject periodically:

10. Brady N.C., and Ray R. Weil. The Nature and Properties of Soils. Eleventh edition. Prentice Hall, New Jersey. This book is available at the bookstore.

11. Follett, R. F., and B.A. Stewart. Soil Erosion and Crop Production. Published by American Society of Agronomy. Madison, Wisconsin

12. Hallsworth E.G. 1987. Anatomy, Physiology and Psychology of Erosion. John Wiley & Sons. New York

13. Lal, R., F.J. Pierce. 1991. Soil Management for Sustainability. Published by Soil and water Conservation Society. Ankeny, Iowa

14. Boardman, J., I.D.L. Foster, and J.A. Dearing. Soil Erosion on Agricultural Land. John Wiley & Sons. New York

15. Lal, R., W.H. Blum, C.Valentine, B.A. Stewart, 1997. Methods for Assessment of Soil Degradation. Advances in Soil Sciences. CRC press, Boca Raton, Florida
16. Cook, R. L., B.G. Ellis. 1987. Soil Management, A worldview of Conservation and production. John Wiley & Sons, New York

17. Willrich, T.L., and G.E. Smith. Agricultural Practices and Water Quality. Iowa State University Press. Ames, Iowa

18. Scott, H.D., 2000. Soil Physics – Agricultural and Environmental Applications. Iowa State Press. Ames, Iowa

19. Soil Science Society of America (ASA). Soils for Management of Organic Wastes and Waste Waters. SSSA, ASA, CSSA, Madison, Wisconsin

TENATIVE COURSE SYLABUS AND CALENDAR OF ASSIGNMENTS

The course outline may change and/or revised if necessary. However, the following outline is our tentative course schedule that we hope to follow throughout the semester.

Week 1*, 2 & 3: An Overview of Soil Properties and their Impact on the Environment

A. Soil Physical properties and their impact on the Environment
B. Soil Chemical properties and their impact on the Environment
C. Soil Microbiology, properties and their impact on the Environment

*Since most of the students who take this class as their upper division science course had not had the pre-requisite introductory soil course (AG 380) therefore major topics of AG 380 may be reviewed in order to update the students for this 'environmental soil science' course.

Week 4 & 5: Soil Erosion, Sediment Loading and Environmental Degradation

A. Erosion Processes and Mechanisms
B. Erosion Prediction Equations
C. Agronomic Impact of Soil Degradation
D. Water Quality as affected by Soil Erosion and Sediment Lost

Week 6 & 7: Soil Resources and the Environment

A. Conservation Management and the Environment
   - Adoption of Soil and Water Conservation Techniques
   - Control of Erosion and Environmental Quality
   - Soil Porosity and Preferential Flow of Water and Chemicals

Week 8 & 9: Non-point Source Pollution

A. Runoff Water and Sediments - Vehicles of Non-point Source Pollution
B. Agricultural Chemicals in Surface/Ground Waters
   - Phosphorus Transport in Agricultural Runoff:
   - Nitrogen and Groundwater Contamination
   - Pesticides and Surface/Ground Water Quality Impacts
C. Best Management Practices for Non-point Source Pollution Control

Week 10 & 11: Contaminated Soils

A. Common Soil and Water Contaminants
B. Contaminant Transport in Soil
C. Assessment techniques for contaminant detection and evaluation
D. Remediation of Contaminated and Chemically Degraded Soils
   - Principals of Soil Reclamation
   - Bioremediation
     - Soil as a Natural Filter

Week 12: Land Application of Organic Wastes

- Waste Characteristics and Waste Streams
- Land application of Organic Waste for Soil Quality enhancement

Week 13 &14: Graduate student presentation and reports

<u>COURSE LEARNING OBJECTIVES</u>

Again depending on how our course syllabus develops, students are expected to obtain knowledge in the following topics upon the completion of the course:

a) Soil Physical properties and their impact on the Environment
b) Soil Chemical properties and their impact on the Environment
c) Soil Microbiological properties and their impact on the Environment
d) Erosion Processes and Mechanisms
e) Conservation Management techniques and procedures
f) Runoff Water and Sediments - Vehicles of Non-point Source Pollutants
g) Agricultural Chemicals and their fate in the soil and water
h) Common Soil and Water Contaminants
i) Basic knowledge on Remediation of Contaminated Soils
j) Principals of Soil Reclamation
k) Bioremediation
l) Soil as a Natural Filter
m) Land Application of Wastes
n) Animal Waste Management and Recycling via Composting

LABORATORY EXCERCISES

In addition to formal laboratory experimentations, students are encouraged to visit local field sites in which the top soil is eroded and students can make observatory assessment of damaged caused by runoff and sediment lost. There are number of animal waste management and recycling facilities in the island that we will also visit as part of out-of the class learning activities. The students will use the composting facilities at the Yigo research station as a lab exercise to learn how to measure different parameters of compost. Furthermore, the Lysimeter Leachate sampling and analysis from our research sites as well as sediment measurement from the flumes at the designated watershed areas will be part of lab exercise for this course during the semester.
Following are the list of TENTATIVE (and/or POSSIBLE) lab exercises and field trips:

Lab I:	Introduction to Laboratory Methods: Basic Chemistry, Physics and some Statistical method reviews (reviewed lab from AG 380 class).
Lab II:	Electro Conductivity Determination
Lab III;	Badland Erosion (Field trip to Ija)*
Lab IV:	Infiltration and Runoff measurement using rainfall simulator
Lab V:	Watershed Management and on site erosion measurements (Field trip)*.
Lab VI:	Lab V continued (Turbidity determination of runoff water)
Lab VII:	Soil and Water Conservation techniques (field trip to Ija research site)*
Lab VIII:	Waste management and Composting (field trip)
Lab VIIII:	Lab VII continued (laboratory measurement of compost parameters)
Lab X:	Environmental Monitoring: Lysimeter leachate sampling
Lab XI:	Leachate sampling analysis ((field trip to research site)*
Lab XII:	Lab XI continued (Bacterial count for water quality evaluation at WERI)
Lab XIII:	Animal Waste Management (field trip)*
Lab XV:	Waste management and Recycling (field trip to Anderson Air force Base or the New Landfill)*
Lab XVI:	Water treatment plants and Solid Waste management (field trip to water treatment plants)*.
	Lab XVII: Compost sampling and parameter measurements (outdoor exercise)*.

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* On these field trips expect to get muddy and wet. Be prepared and wear proper clothing, and have enough water and liquid to avoid dehydration while working out in the field and/or walking rough train.

METHODS OF COURSE EVALUATION

The student's progress in AG 481/G is evaluated through two midterms and a final exam and class participation. Please note that the **final exam is comprehensive**. Students also shall perform additional task that consist of class assignments and laboratory exercises as well as class presentation and discussions.

Grading criteria for undergraduates

Activity	Grade %
2 midterm exams (15% each)	30
1 final exam (comprehensive)	25
Lab Reports	20
Home Works	15
Class Attendance	**10**
Total grades earned	100%

Grading criteria for Graduates

Activity	Grade %
2 midterm exams (10% each)	20
1 final exam	20
Lab Reports	20
Home Works	15
Class Attendance	**10**
Term Paper/Proj Report	15
Total grades earned	100%

Lab's grading

Students are required to conduct all the labs and provide a complete lab and/or field trip reports. Lab or field trip reports are due a week after the lab experiment is conducted. Some labs (field trips) are broken done into separate sections, your instructor will let you know whether to present a separate report for each lab section or prepare a comprehensive final report to include different sections in one lab/field report. Total possible point for all the labs and field trip reports will add up to 100%; however each lab will be weighed accordingly.

Final Grading Breakdown:

90-100%	A
80-89%	B
70-79%	C
60-69%	D

Note 1: Notice that there is no 'F' grade listed, provided that students attend all the lectures as well as lab sessions (instructor should be notified for the excusable absents). Attendance will carry 10% of total grades. Students missing more than 3 non-excusable sessions (lectures and/or labs) will receive substantially reduced 'class attendance' grade.

Note 2: Related to note #1, unless you are using your computer for typing and taking lecture notes, otherwise the use of; lab tops, tablets, iPods, cell phone, iphone, youphone, and other similar devices/gadgets are prohibited and the only two things that is allowed during the lectures that has an 'i' and/or a 'you' in it is that 'iteach' and 'youlearn'.

Note3: This syllabus is subject to revision and/or improvement throughout the semester. Also the sequence of the lectures (as well as the labs) may vary as discussions may lead from one topic to another and/or due to unexpected events (i.e., typhoon) and time limitations.

Note 4: Please note that some of the lab exercises require filed/site visit. Therefore, students are required to report to the lab or to a designated area (as identified by your instructor prior to the lab) on time in order to leave for field trips on time and be back in the college on time. Also, some of these field/site visits require walking or hiking harsh trains so come prepared with proper clothing and bring couple of bottles of drinking water to avoid dehydration. Also prepare to bring umbrella and other protective items in case of rain or hot sunshine.

Note 5: If you are a student with a disability who will require an accommodation (s) to participate in this course, please contact your instructor privately to discuss your specific needs. You will need to provide documentation concerning your need for accommodations(s) from the EEO/ADA offices. If you have not registered with the EEO/ADA offices, you should do so immediately at 735 – 2244/2971/2243 (TTY) to coordinate your accommodation request.

College of Natural and Applied Sciences
University of Guam
AG-485
Tropical Fruit Production (4 credits)

Instructor: Thomas E. Marler
Professor, Tropical Fruit Science & Plant Physiology

COURSE DESCRIPTION: An overview of the fundamental principles and the various aspects of growing sub-tropical and tropical fruit in the Mariana Islands. Basic and applied sciences that deal with growing fruit crops will be covered during the first half of the semester. General descriptions of important species will be covered during the remainder of the semester.

SPECIFIC OBJECTIVES: Develop a working knowledge of tree, flowering, and fruiting characteristics of all tropical fruit crops of importance to the Mariana Islands. Develop a full understanding of cultural methods for production of the major fruits of Guam. Identify and correctly name all of the common fruit bearing species on Guam. Successfully learn fruit preservation methods.

COURSE REQUIREMENTS:

1. Attendance and participation..... 100 points
2. Exam on first half of semester..... 100 points
3. Exam on second half of semester..... 100 points
4. Species identification..... 50 points
5. Laboratory Participation and Manual..... 100 points

GRADING SYSTEM:

A 90% - 100%
B 80% - 89%
C 70% - 79%
D 60% - 69%
F 00% - 59%

OFFICE: AHR 319

OFFICE HOURS: By appointment

OFFICE TELEPHONE: 735-2130

University of Guam
Course Outline

AG485 Tropical Fruits Horticulture (4 credits)

1. CATALOG DESCRIPTION

This course covers tropical fruits, their botany, taxonomy and uses, including detailed study of important fruits and their impact on life in the tropics. Topics to be covered are: relationship of the environment; plant structure; and cultural practices to yield and quality; propagation methods; seed viability, dormancy and seed treatments, fertilizers, growth regulators, and modification of season of production; and stock and scion relationships. The course meets for three hours lecture and three hours laboratory weekly. Prerequisite: AG 181 or consent of instructor.

2. COURSE LECTURE CONTENT

This course presents an overview of the fundamental principles and the various aspects of growing sub-tropical and tropical fruit species in the Mariana Islands. Basic and applied sciences that deal with growing fruit crops will be covered during the first half of the semester. Specific descriptions of important species will be covered during the remainder of the semester.

3. RATIONALE FOR THE COURSE

This course is an elective upper division horticulture course for all majors in the Agriculture Degree and the Agriculture Secondary Education Degree.

4. SKILLS AND BACKGROUND REQUIRED OR EXPECTED

AG 181 is the only prerequisite. AG 101 and/or other experience in plant science may substitute for the prerequisite with the consent of the instructor.

5. TEACHING METHODS AND ANTICIPATED CLASS SIZE

Lectures will consist of dialogue among the class members and instructor. Laboratory exercises will consist of short term and long term experiments which are designed to demonstrate fundamental principles of plant structure and function.

6. ADDITIONAL COURSE DESCRIPTIONS

Major emphasis will be placed on incorporating current topics into the learning process.

7. LEARNING OBJECTIVES FOR STUDENTS

Develop a working knowledge of tree, flowering, and fruiting characteristics of all tropical fruit crops. Develop a full understanding of cultural methods for production of the major fruits on Guam. Identify and correctly name all of the common fruit-bearing species on Guam.

8. METHODS OF EVALUATION

Written exams, quizzes, and written projects will be used to evaluate progress in lectures. Written reports will be used to evaluate laboratory participation and results.

9. REQUIRED AND RECOMMENDED TEXT AND/OR STUDY GUIDES

Most of the resource material for this course will be provided by the instructor. A recommended but not required text is *Morton, J.F. 1987. Fruits of Warm Climates. Creative Resource Systems, Box 890, Winterville, NC 28590.*

10. SUBSEQUENT COURSES

This is an elective upper division course.

Syllabus: AG 486 Ornamental Crop Production in the Tropics

Instructor:
James McConnell
CALS Room 317
Phone 735-2129
E-mail: tinanum@kuentos.guam.net

Office Hours:
MTW 11:30-1:00 PM or by appointment

Required Texts:
Ornamental Crop Production, Jack ingels, 3rd edition, Delmar Press.
House Plant Expert. D.G. Hessayon. 2nd Edition.
Students are also required to have a current library card.

Internet-based information:
Web pages for AG 486 links are found at: http://www.uog.edu/cals/site/people/mcconnel.html
All students are required to have a working e-mail address submitted to the instructor.

Course and Lab Work:
This course focuses on the production of ornamental crops in nurseries in the tropics giving an overview of the art, science and technology of propagating and growing ornamental plants. Crops most suited to growing in the tropics will be emphasized.

Class:
Lectures: CALS Room 124 A 10 to 11:20 am MW

Labs:
Room 127 (unless instructed otherwise)
Tuesdays from 2:00 to 5 PM.
Activities include: Plant ID quizzes, discussion, demos, hands-on horticulture activities, lectures on specific crops and various specific production methods, local field trips. Many of the activities will be conducted outside. Be prepared to work outside (sun protection, proper clothing, rain protection).

Exams:
1. Two midterm exams and one final exam
2. Occasional pop-quizzes
3. Reading assignments can be found on the schedule (Questions at the end of the chapters should be completed and turned in by the class following the lecture to which it corresponds).
4. Additional reading assignments will be distributed during lectures.

Project:
Each student is required to do a project. This involves researching how to produce a selected nursery crop and making a written and oral report. The grading of this work will be based on a written report and an oral presentation to the class.

Plant ID Quizzes:
There will be weekly Plant ID Quizzes given during the first half hour of the lab. This quizzes will ask for you to identify plants from photos other than the ones in your text. You will be expected to know the Family, Genus, species, common name and some cultural information or uses of the plant. The quizzes will generally have at least 18 photos. You will need to fill in information in 50 of the blank spaces. The 2 lowest quiz scores will be dropped. Retests will be given, by appointment. The make up score will be averaged with the original.

Course Grading System:
This table indicates the percentages of each graded item in the final grade:

Graded Item	% of final grade
Class Attendance and Participation	5
First mid-term exam (Review take home test)	5
Second mid-term exam	15
Plant ID Quizzes	20
Lab grade	15
Pop-quiz, Assignments, Questions	5
Project grade	15
Final Exam (Take Home)	20
Total	100

Deadlines for submitting work:

Assignments and reports are due at the start of the lecture or lab on the due-date. Generally, late work will be accepted without penalty until 4 PM on the due date. Work submitted after 4 PM on the due date will be deemed as being late and will be penalized 5%; work that is more than 24 hours late will be penalized 10%. Work that is more than 2 days late will not be accepted unless special arrangements are made within 2 days of the due date with the instructor who assigned the work. The late penalty will be 5 percentage points per day late up to 25%.

Final Exam:
The final exam will be distributed the last day of class and will be due at the scheduled final exam time.

AG486 Project Information

Purpose:

Although you will be exposed to a lot of information about ornamental crop production in this course, you will only be exposed to a few crops in the class and labs. What happens if you work in the industry as a grower and are asked to produce an unfamiliar crop? How do you look up information pertinent to growing and producing a new, unfamiliar crop? The objective of this project is to provide you with this experience.

Guidelines:

For this project you will research the production requirements of one nursery-produced crop. Each student in the class will have a different plant to deal with. The plant material is selected by the student and subject to approval by the instructor. Crops will be approved on a first-come/first-served basis.

There is an alternative for those who do not wish to work on a specific crop. You may chose a topic related to nursery production that interests you and research it. You would need to first consult with the instructor to determine feasibility and then submit a proposal in the same way as for a specific crop. As with the crops, the expectation is that the material would not simply cover the material presented in the course, but material that is not covered.

Once approval has been granted, the pertinent information should be researched in the library and from whatever materials you can get. You must start this early in the semester since there are a lot of crops for which there is no readily-available information in the library. You might have to write off for information or, in the worst case, select another crop for which you can get information. Due to the short time-span of the course, there is no requirement to actually grow this crop. If the project leads you to want to know even more about a crop or area of horticulture, then arrangements can be made for you to take an independent study or directed research course during the following semester.

Once you have assembled and studied the information you should prepare a report to the specifications described below. All reports will be bound into one big report; each registered student in the class will receive a copy of this.

During the last lab period each student will make a short presentation on his/her crop to the class. The assembled reports will be available as a handout.

Due Dates (see Class schedule for calendar dates)	What is due
Lecture #10	Project Proposal Form
Lecture #23	Written report
Last lab period	Oral presentation

Report content and format:

The written report should consist of at least 5, and not more than 10, single-spaced pages of high-quality printed text. The content should include everything pertinent to the production of the crop from propagation to marketing, but focusing particularly on production. If there are special problems or techniques, make sure you mention these. Provide citations which would allow others to track down useful information. The final report should allow someone to grow the crop without too much additional research.
In the case of a report on a crop, include, but do not limit yourself, to the following:

INTRODUCTION:
common and scientific name; a description or picture of the plant material; interesting historical information (be brief); importance of the crop, market size and/or share or potential; other interesting background information.

PRODUCTION:
propagation: source and type of stock, methods; scheduling considerations; pest and disease management considerations; pre-plant preparations; environmental requirements: light, temperature, soil, nutrition and water.

POST PRODUCTION:
What are the post-harvest needs.

BIBLIOGRAPHY:
List sources of information. Use citations and footnotes as required in the text.
Use tables, graphs, black-and-white photos to illustrate your point.
Your report grade (75% of the project grade) will be based on completeness, accuracy, scope, legibility, and how well it is written. Neatness and organization count.
Written report format: (You must adhere to this format, or you will loose points). The final draft needs to be done in black and white, single-spaced, in a font no smaller than 10 point, with 1-inch margins all around, printed on a computer printer. Do not provide a fancy cover or separate title page. Please use the following format for the first page: Center across the top the title of your project. On the next line put your name. Then leave one line blank and begin your report on the next line.

The complete volume will be reproduced in black and white. If you wish for your contribution to have color pictures then you will have to arrange in advance for the color copies to be printed.

Oral presentation:

Prepare yourself by making an outline and collecting all the illustrative materials. While it is advisable to use notes for your presentation, you should not simply read your notes or your report. The talk must be concise and clear. You should plan for 2 minutes less than the allocated time. Practice your talk beforehand. Grading will be based on accuracy and correctness of the presented information and how well the information is presented. If you know, or fear, that you will have difficulty making your presentation, please see instructor to discuss the situation.

It is highly recommended that you do your presentation with PowerPoint or some computerized presentation system that allows you to present the material and illustrations in an easy and effective manner. A computer and projector will be made available to you. You may bring your own equipment if you like. You can also arrange for practice time with these if you like. The ideal way to get the file to the computer is to save it on a CD or, if it fits, a floppy disk. If your computer does not have a way to save large files, then you better figure out how you will do this some days ahead of time (talk to me).

Fill it out and hand in the following page on the 10th Lecture:

AG 486 Project Proposal

Print out, fill in and submit by the due date. Alternately you can e-mail the information to James McConnell (tinanum@kuentos.guam.net).

The project proposal consists of one page (this page) including the following information:

Name:

Today's date:

Common name of proposed plant and product:

Scientific name:

Reasons why I want to work on this crop:

I have identified the following resources to aid me in developing the information needed to complete my project:

Special Projects
AL490 Syllabus - Fall 2016

*Note: Beginning Fall 2016, AL490 replaces AG490 and CF490.

Instructor:	[Faculty Supervisor name]	
Office: ALS rm. [XXX]	**Phone:** 735-xxxx	[insert instructor email address]
Office Hours:	[insert instructor office hours]	

Course Catalog Description

The ALS Special Projects course is a pre-requisite course to the AL 499 Capstone Seminar. This course is designed to give the student field or laboratory experience within the UOG Research and Extension framework. UOG faculty-directed projects are designed for individual students. The student is required to complete 45 contact hours per credit hour (i.e. 90 hours for 2 credits or 135 hours for 3 credits) directed research or extension during the semester. This course may be repeated once; a maximum of 4 credit hours may be applied towards the ALS degree.

Prerequisites: EN111, CO210, Jr/Sr standing AND Consent of Instructor.

Course Content

1. Project Proposal: Student will meet with Faculty Supervisor to establish a plan-of-work for the duration of the Special Projects period. The plan-of-work will include a work schedule, project objectives and intended student learning outcomes. The plan-of-work should be submitted within the first two weeks of the Special Projects Period to the Program Advisor.
2. Orientation to Project: Student will receive a comprehensive orientation, safety training and overview of the program by the Faculty Supervisor.
3. Training: Student will receive direct technical and/or professional training to complete the proposed project under the supervision of experts at the University of Guam.
4. Progress Reports: Student will submit weekly written updates of project-related tasks and activities in the format (i.e. laboratory notebook and/or AL490 Progress Report Form) specified in the Project Proposal.

5. Contact Hours: For two (2) credit hours, the students is required to complete 90 hours of direct work experience, project advisement and evaluation by the Faculty Supervisor. For three (3) credit hours, the requirement is 135 hours.
6. Final Evaluation: In the final week of the Special Projects period, the student will coordinate submission of a AL490 Student Evaluation Form to the Program Advisor. The final grade will be assigned by the Faculty Supervisor.

Student learning objectives

- Develop content knowledge of specific topics related to a technical or professional field in agriculture and the life sciences.
- Gain hands-on experience in technical or professional area.
- Develop teamwork and networking skills in a professional setting.
- Master interpersonal communication skills in a professional, career-oriented setting

Evaluation and Grades

Students will be evaluated on their understanding of their project, submission of course assignments and completion of required contact hours.

Grade Breakdown	% of total
Project Proposal	15%
Weekly Written Updates of Project Activities	30%
Completion of Contact Hours	20%
Student Experience Report	10%
Final Evaluation by Internship Supervisor	25%

Required texts

none

Academic Integrity Policy

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Tobacco Policy

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Special Needs (EEO/ADA)

If you are a student with a disability who will require an accomodation 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 from the EEO/ADA Office. If you have not registered with EEO/ADA Office, you should do so immediately at 735-2244/2971/2243 (TTY) to coordinate your accommodation request.

Course	*AG491 – Seminar*
Semester	Spring 2016
Class time	W 12:30-13:20
Instructor	Dr. Lee Yudin
Office	CNAS Dean's Office, ALS Rm 206
Telephone	735-2001
Office Hours	By appointment.

Catalog Description:

This course is designed to familiarize the student with current agricultural research and issues. This course is intended for upper level students; others must have consent from the instructor.

Required Texts:

none

Rationale for the Course:

This course provides upper division agriculture students dedicated course time for critical analysis and presentation of scientific literature to a group of their peers.

Prerequisites:

Upper division standing or consent of the instructor.

Grading and Evaluation: **Key to passing this course**

1. Keep up with the assigned reading for each class
2. Attendance – worth 25 points
3. Ask questions and be involved.

Course Student Learning Outcomes (SLOs)

1. Student will be able to use a PowerPoint in presenting their findings.
2. Student will be able to organize findings/ideas to create effective communication.
3. Student will be able to perform an oral presentation to public audience.

ALS Program Learning Outcomes(PLOs)

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PLO1 - Disciplinary Knowledge and Skills: Graduates will demonstrate integrated knowledge in their chosen fields of study and related sciences.

PLO2 - Research Skills: Graduates possess critical thinking and analytical skills. Graduates are competent in basic procedures and safety protocols in conducting research. Graduates can use their knowledge and understanding of scientific concepts to explain and solve problems in their field.

PLO3 - Analytical Skills: Graduates can apply quantitative and/or qualitative analytical methods in agriculture and the life sciences.

PLO4 - Communication Skills: Graduates can gather and assess information and use it to create effective research and outreach communication media and oral presentations.

PLO5 - Ethics and Professionalism: Graduates understand the ethical principles underlying research, publication, and professional behavior. Graduates can demonstrate teamwork and networking skills, and understand the importance of providing correct credit for others' work.

PLO6 - Multicultural Competence: Graduates will develop cross-cultural respect and a foundation for lifelong multicultural competence.

PLO7 - Lifelong Learning and Integration of Knowledge from the Sciences and the Arts: Graduates can empower themselves through life-long learning to enhance their knowledge base, and demonstrate an ability to integrate knowledge from the sciences and the arts.

UOG Institutional Student Learning Outcomes (ILOs)

For more information about the following ILOs, please refer to www.uog.edu/adminstration/academic-and-student-affairs/accreditation/assessment-and-program-review.

ILO-1 Mastery of critical thinking and problem solving

ILO-2 Mastery of quantitative analysis

ILO-3 Effective oral and written communication

ILO-4 Understanding and appreciation of culturally diverse people, ideas and values in a democratic context

ILO-5 Responsible use of knowledge, natural resources, and technology

ILO-6 An appreciation of the arts and sciences

ILO-7 An interest in personal development and lifelong learning

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Special Needs (EEO/ADA)

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Notification of Rights Under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their education records. These rights for students, parents and school officials can be viewed at http://www2.ed.gov/policy/gen/guid/fpco/ferpa/index.html.

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Internship
AL498* Syllabus - Fall 2016

*Note: Beginning Fall 2016, AL498 replaces AG498 and CF498.

Instructor:	[insert Program Advisor name]	
Office: ALS rm. [XX]	**Phone:** 735-xxxx	[instructor email address]
Office Hours:	[instructor office hours]	

Course Catalog Description

AL 498 INTERNSHIP (2-3 credits) F/SP

The ALS Internship course is a pre-requisite course to the AL 499 Capstone Seminar. This course is designed to give the student field experience outside of the university. Students are required to work in a professional or technical, advisor-approved area under the supervision of an expert in the field. The student must complete 45 contact hours per credit hour (i.e. 90 hrs total for 2 credits, 135 hrs total for 3 credits) as an intern at an off-campus professional or technical venue. The student is also required to meet with their advisor for pre-, mid-, and post-assessments. This course may be repeated once; a maximum of 4 credit hours may be applied to the ALS degree. **Prerequisites:** EN111, CO210, Jr/Sr standing AND Consent of Instructor.

Course Content

1. Project Proposal: Student will meet with Internship Supervisor and Program Advisor to establish a plan-of-work for the duration of the internship period. The plan-of-work will include a work schedule, project objectives and intended student learning outcomes. The plan-of-work should be submitted within the first two weeks of the Internship Period to the Program Advisor.
2. Orientation to Project: Student will receive a comprehensive orientation, safety training and overview of the program by the Internship Supervisor.
3. Training: Student will receive direct technical and/or professional training to complete the proposed project under the supervision of experts at the Internship work site.
4. Progress Reports: Student will keep notes to summarize the activities and learning experiences using the AL498 Intern Progress Report Form. Progress reports will be submitted weekly to the Program Advisor.

5. Contact Hours: The student is required to complete 45 contact hours per credit hour enrollment (i.e. 90 hours for 2 credits, 135 hours for 3 credits) which may include up to 15 hours of project advisement and evaluation by the Program Advisor.
6. Internship Experience Report: Student must submit an Internship Experience Report to the Program Advisor by the last day of classes for the semester. The Report will be used to determine the student's final grade.
7. Final Evaluation: In the final week of the Internship Period, the student will collect a completed and signed Evaluation Form from the Internship Supervisor and submit the form to be signed by the Program Advisor. This form will be used to determine the student's final grade. The student will be evaluated separately by both the Internship Supervisor and Program Advisor.

Student learning objectives

- Develop content knowledge of specific topics related to a technical or professional field in agriculture and the life sciences.
- Gain hands-on experience in technical or professional area.
- Develop teamwork and networking skills in a professional setting.
- Master interpersonal communication skills in a professional, career-oriented setting

Evaluation and Grades

Students will be evaluated on their understanding of their project, submission of course assignments and completion of required contact hours.

Grade Breakdown	% of total
Project Proposal	15%
Weekly Progress Reports	25%
Completion of Contact Hours	25%
Internship Experience Report	10%
Final Evaluation by Internship Supervisor	15%
Final Evaluation by Program Advisor	10%

Required texts

none

Academic Integrity Policy

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Special Needs (EEO/ADA)

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