**SYLLABUS**

**AL-101-01 Introduction to AgricultureSpring Semester 2022**College of Natural and Applied Sciences

University of Guam

**Class Meeting Times**

Section 01: Lectures in ALS 127, M, W, & F, 8:00 AM to 8:50 AM

Labs in ALS 124, Thursdays, 8:00 AM to 10:50 AM

**Instructor** Robert F Bevacqua, PhD

[bevacquar@triton.uog.edu](mailto:bevacquar@triton.uog.edu)

Office location ALS 218, no telephone

Office hours: via email or before or after class or in ALS 218

**Teaching Assistants**

**Catalog Description**This course is an introduction to the science of agriculture. This course explains the scientific principles behind the discipline that provides food, shelter, and clothing to the world’s population. Three hours of lecture. Co-requisite: enrollment in AL-101L, a three-hour laboratory class. Prerequisite: MA-085 or higher.

**Textbook/Computer Access/Binder**

No text book 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/#](http://cnas-re.uog.edu/)). Handouts are available at the Moodle site for AL-101-01.

**Course Learning Outcomes**

Student learning outcomes (SLO) will be:(with PLO, ILO, and activities/assessments).

1. Agriculture is a broad, science-based, industry engaged in the production of plants and animals for food and fiber. PLO-1, ILO-1, exam.
2. The scientific method is the process used in research that includes observations, hypotheses, experiments, and conclusions to generate knowledge. PLO-2, ILO-1, song or story, exam.
3. The origins of agriculture lie in the Middle East with the domestication of plants and animals 10,000 years ago. PLO-6, ILO-4, exam.
4. Modern agriculture integrates a range of scientific disciplines including soil science, biology, horticulture, physiology, genetics, engineering, entomology, pathology, aquaculture, animal science, and economics. PLO-3, ILO-1, ILO-2, survey, written paper, design contests, exam.
5. The dominant position of US agriculture in the world economy. PLO-1, ILO-2, exam.
6. The threat posed by invasive species to agriculture. PLO-4, PLO-5, ILO-3, ILO-5, oral presentation based on research at UOG.
7. Agriculture’s relationship to the environment and the roles of sustainability and environmental stewardship for the future. PLO-1, ILO-5, ILO-7, video, exam.

**ALS Program Learning Objectives (PLO)**

*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).**

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

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

## **DSS Accommodation Services**

## If you are a student with a disability who will require an accommodation(s) to participate in thiscourse, please contact the Student Counseling and Advising Service Disability Support Services office todiscuss your specific accommodation needs confidentially. A Faculty Notification letter will be emailed to me specifying your approved accommodations. If you are not registered, you should do so immediately at the Student Center,Rotunda office #5, [sssablan@triton.uog.edu](mailto:sssablan@triton.uog.edu) or ph/TTY: 735-2460, to coordinate your accommodation request.

**Academic Dishonesty**

Professional and ethical conduct is expected at all times. Unethical conduct includes any form of cheating, including plagiarism. The term “**cheating**” includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests, or examinations, e.g., looking at other students’ answers, using crib notes (including electronic), getting information from another person via any kind of communication; (2) dependence upon the aid of sources beyond those authorized by the instructor in writing papers, preparing reports, solving problems, or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the University faculty or staff. If you need to use an electronic translator, you must discuss this with me in advance. All assignments and tests must be your own work. Answers you write on the tests must come only from in your head or the information supplied in the test papers; anything else is cheating. Any evidence of cheating will result in a “0” for that assignments and/or exam or possibly an “F” for the entire course – final decision to be determined by me, the course instructor.

**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. For more information visit: <http://www.uog.edu/smoke-free-uog>

**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.

* 1. Contact OIT for technical support at 735-2630 or [oit@triton.uog.edu](mailto:oit@triton.uog.edu)
  2. Contact the Triton Advising Center at 735 – 2271 or [tac@triton.uog.edu](mailto:tac@triton.uog.edu)
  3. 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.

**Course Format**

Learning activities will be the focus of the lecture sessions. Students are expected to engage in a variety of learning activities, such as oral presentations, interviews, position papers, surveys, games, contests, songs, skits, debates, drawings, written reports, and videos. Students are expected to attend all classes and take notes.

**Written Paper**

Each student is expected to compose a grower’s guide on the production of a local crop utilizing information generated by UOG faculty. The paper must include references that are properly formatted.

**Oral Presentation**

Each student is expected to make an oral presentation on an invasive species.

**Course Policies**

1. Participation (attendance) is required. Attendance is taken at the start of each class. Three tardies equal one absence.
2. No late assignments accepted.
3. No extra credit is available.

**Grading**(400 points)

* Activities/participation 200
* Midterm exam 50
* Written paper - grower’s guide 50
* PSA (video) promoting island agriculture 25
* Oral presentation on invasive species 25
* Faculty evaluation 0
* Final exam 50
* TOTAL 400

Points Percentage Grade 360 - 400 90% - 100% A 320 - 359 80% - 89% B 280 - 319 70% - 79% C 240 - 279 60% - 69% D 0 - 239 00% - 59% F

**Course Content: Weekly Lecture Themes**

1. Science of agriculture: scientific method & experiment design.
2. Origins of agriculture & overview of world agriculture.
3. Soils and plant nutrition.
4. Cells and organelles: building blocks for life.
5. Plant systems: roots, stems, and leaves.
6. Plant reproduction: flowers, fruit, and seeds.
7. Plant propagation: sexual & vegetative.
8. Metabolism: photosynthesis & respiration.
9. Genetics: genes, chromosomes, & GMO’s.
10. Animal science: animal systems.
11. Animal science: animal reproduction.
12. Role of water & irrigation.
13. Insect & disease management
14. Sustainable agriculture: economic, social, and env. aspects.
15. Agriculture & the environment: environmental stewardship.
16. Invasive and endangered species.
17. Review