#### **AGRI 10 Course Outline as of Fall 2004**

# **CATALOG INFORMATION**

Dept and Nbr: AGRI 10 Title: INTRO AG SCIENCES Full Title: Introduction to Agricultural Sciences Last Reviewed: 3/9/2015

Units		Course Hours per Week		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	3.00	17.5	Lecture Scheduled	52.50
Minimum	3.00	Lab Scheduled	0	17.5	Lab Scheduled	0
		Contact DHR	0		Contact DHR	0
		Contact Total	3.00		Contact Total	52.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 105.00

Total Student Learning Hours: 157.50

Title 5 Category:	AA Degree Applicable
Grading:	Grade or P/NP
Repeatability:	00 - Two Repeats if Grade was D, F, NC, or NP
Also Listed As:	
Formerly:	AG 10

#### **Catalog Description:**

A course designed to acquaint students with basic scientific principles through applied experiences of an agricultural nature. Specific topics include taxonomy, physiology, reproduction, biochemistry, genetics, economics, and consumerism as they relate to the plant and animal sciences.

#### **Prerequisites/Corequisites:**

**Recommended Preparation:** Eligibility for ENGL 100 or ESL 100.

#### **Limits on Enrollment:**

#### **Schedule of Classes Information:**

Description: Basic scientific principles relating to animal science, plant science, viticulture, soil science & agribusiness. (Grade or P/NP) Prerequisites/Corequisites: Recommended: Eligibility for ENGL 100 or ESL 100. Limits on Enrollment:

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: CSU GE:	<b>Area</b> C <b>Transfer Area</b> B2	Natural Science	es	Effective: Fall 1981 Effective: Fall 1981	Inactive: Fall 2020 Inactive: Fall 2020
<b>IGETC:</b>	Transfer Area			Effective:	Inactive:
CSU Transfer	:Transferable	Effective:	Fall 1981	Inactive:	Fall 2020
UC Transfer:	Transferable	Effective:	Fall 1981	Inactive:	Fall 2020

### CID:

**Certificate/Major Applicable:** 

Certificate Applicable Course

# **COURSE CONTENT**

### **Outcomes and Objectives:**

The student will:

- 1. Demonstrate an understanding of the scientific principles involved within plant science, animal science, soil science, and viticulture/enology.
- 2. Recognize consumer trends within agriculture involving agricultural products and by-products.

# **Topics and Scope:**

- 1. Agricultural History and Classification Systems.
  - A. ancient culture and history
  - B. agriculture in America
    - 1. agricultural revolution
    - 2. milestone inventions
    - 3. modern agricultural advances
    - 4. state and local agricultural
  - C. plant taxonomy
- 2. Biochemical Reactions in Agriculture
  - A. photosynthesis
  - B. respiration
  - C. transpiration
  - D. nutrient uptake
- 3. Reproduction in Plants.
  - A. vegetative
  - B. sexual
  - C. genetics and plant improvement
- 4. Soil and Plant Nutrition.

- A. geology
- B. physical properties of soil
- C. chemical properties of soil
- D. plant nutrition and soil fertilization
- 5. Application of Scientific Principles to the Fields of Viticulture
  - and Enology.
    - A. wine making principles
      - 1. biological fermentation
      - 2. effects of aging on wine
      - 3. chemical composition of wine
    - B. culturing grapes
      - 1. climatic effects
      - 2. effects of soil
      - 3. controlling the environment
- 6. Application of Scientific and Economic Principles to the Field of Animal Husbandry.
  - A. components of the livestock products
  - B. changes in consumer preference for livestock products
  - C. dairy and dairy products
    - 1. physiology of production
    - 2. preservation of dairy products
  - D. the meat animal
    - 1. environmental controls
    - 2. nutrition and growth
    - 3. taxonomy
    - 4. consumption trends

# Assignment:

- 1. Exams.
- 2. Quizzes.
- 3. Term paper.

# Methods of Evaluation/Basis of Grade:

**Writing:** Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

Reading reports, Term papers

**Problem Solving:** Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Quizzes, Exams

**Skill Demonstrations:** All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Writing 0 - 15%

Problem solving 0 - 15% None

**Exams:** All forms of formal testing, other than skill performance exams.

Multiple choice, True/false, Matching items, Completion

**Other:** Includes any assessment tools that do not logically fit into the above categories.

None

**Representative Textbooks and Materials:** 

Skill Demonstrations
0 - 0%

Exams 0 - 70%

Other Category 0 - 0%