

YOSEMITE REGIONAL OCCUPATIONAL PROGRAM

COURSE OUTLINE

COURSE TITLE: Agriculture 4 ROP S1 Agriculture 4 ROP S2
COURSE NUMBER: ROP01641 ROP01642
RECOMMENDED GRADE LEVEL: 11, 12
DURATION: 4 semesters or 2 summers and 2 semesters
CREDIT: Variable; up to 15 per summer, 10 per semester for a maximum of 40
MEETS GRADUATION REQUIREMENTS: Practical Arts
REQUIRED FOR GRADUATION: No
CBEDS CODE: 4098
MEETS UC AND CSU ENTRANCE REQUIREMENTS: No
CREDENTIAL REQUIREMENTS: Single Subject Agriculture
REPLACES:

Course Description:

AGRICULTURE 4 is designed to introduce students to agricultural occupations and careers and provide hands-on training in various entry-level positions in the area(s) of agriculture business and communications, agriculture mechanics, animal science, plant science, horticulture, and floriculture.

Course instruction – This course is designed to allow students the opportunity to gain knowledge and skills in their perspective area of interest in the agriculture industry. The course emphasizes the necessary knowledge and skills to provide the student with a foundation leading to understanding agriculture career trends and options, employment regulations, job safety, communication, leadership, college/university and career technical education opportunities, critical thinking, business management, economic principles, sales and marketing, and record keeping. Students will connect and apply this foundation towards their specific agricultural industry area of interest through job specific training at an industry related community classroom or cooperative community classroom. This methodology will include individualized training plans which outline specific training targeted to match occupational competencies required for the job.

Key instructional methods include direct supervision via lectures and PowerPoint presentation, discussion, cooperative learning, project-based learning, career development portfolio, and job specific training at an industry related community classroom or cooperative community classroom site. Leadership skills are developed through FFA. Frequent opportunities are also given to develop and apply rational and creative thinking processes of observing, comparing, organizing, relating, inferring, applying and communicating. There is an emphasis on developing values, aspirations, and attitudes that promote the students understanding personal involvement with the scientific explorations and discoveries of the future. These hands-on science experiences are designed to enhance the student's understanding of Agriculture, the environment, and society.

Recommended Prerequisites: None

Date Matched Against State Framework
Model Curriculum Standards, and State
Curriculum Guides:

November 10, 2008

Board Approved:

January 17, 2012

REVIEW CYCLE: 2011-12 through 2015-16

REQUIRED TEXTBOOK (Title, publisher, year): AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition, AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised Third Edition 2009 or Latest Edition

INSTRUCTIONAL MATERIALS

This includes, but is not limited to, computer resources, textbooks, video/audiovisual, websites, trade publications, laboratory materials, and specialized equipment.

Basic Text(s):

AgriScience Explorations, Morgan, Lee, Wilson, Pearson Education, Inc., Revised
Third Edition 2009 or Latest Edition

AgriScience Explorations, Activity Manual, Mika, Pearson Education, Inc., Revised
Third Edition 2009 or Latest Edition

Supplementary Text(s):

WELDING: Principles and Applications; Jeffus; Delmar

Agriscience Explorations, Teacher's Manual

Agriscience Explorations, Activity Manual Instructor's Guide

ExamView® Test Bank CD-ROM for Comprehensive Titles

Visual Aids on PowerPoint® CD-ROM

SUMMARY OF MAJOR UNITS OF INSTRUCTION

	<u>Approximate Length</u> <u>(Hours)</u>
A. Orientation	4
B. Safety and Work Ethics	10
C. Career Options Exploration	4
D. Employability	15
E. Communication	6
F. Leadership	11
G. Agriculture Research Project	10
H. Scholarships/Higher Education	5
I. Agribusiness Management	20
J. Personal Financial Management	4
K. Government Agencies	4
L. Industry Explorations	15
M. Community Classroom Training	<u>252</u>
Total	360

1.0 Goal: Orientation

Students will become aware of correct procedures related to the ROP program and occupations and the importance to the individual and society.

- 1.1 Complete and explain the purpose of the following ROP paperwork.
 - a. Socrates Enrollment
 - b. Registration Permit
 - c. Community Classroom Permit/Training Plan
 - d. Community Classroom Rules
 - e. Work Permit
 - f. Joint Venture Training Agreement
- 1.2 Demonstrate a clear understanding of attendance, grading, and timecard policies.
- 1.3 Demonstrate a clear understanding of ROP placement and site allocation procedures.
- 1.4 Create a resume, cover letter, and reference using a word processing program and present documents to site supervisor.

Anchor Standards: 3.9, 4.6, 11.1, 11.5
Career Readiness: 1

2.0 Goal: Safety and Work Ethics

The student has demonstrated safe work habits and attitudes.

- 2.1 Explain the purpose and functions of OSHA in the workplace.
- 2.2 Identify and explain the labor laws that govern teens in the workplace.
- 2.3 Identify and explain the labor laws that govern adults in the workplace.
- 2.4 Describe accident prevention techniques and provide methods to prevent accidents in the workplace.
- 2.5 Explain and implement procedures to be followed in the event of an emergency or accident in the workplace or classroom.
- 2.6 List factors that contribute to farm accidents.
- 2.7 Describe management's responsibility related to farm safety.
- 2.8 Identify sources of safety information.
- 2.9 Describe variations and parameters pertaining to particular job sites.
- 2.10 Identify instances of sexual harassment and provide appropriate solutions to deal with such workplace issues.
- 2.11 Identify, describe, and demonstrate positive work ethics in the workplace.

Anchor Standards: 6.2-6.7
Career Readiness: 1, 6

3.0 Goal: Career Options Exploration

Demonstrated awareness of career opportunities in careers related to the industry.

- 3.1 Explore, research, and describe the levels of career opportunities available to individuals in the agriculture industry.
- 3.2 Identify and describe a career interest in an agriculture or agriculture-related occupation.

- 3.3 Analyze the skills, abilities, and education required to gain entry into the student's occupational choice.
- 3.4 Develop a plan of action, Career Plan, for accomplishing an occupational objective.
- 3.5 Explore and research current trends and careers in agriculture using the Eureka Career Information System.
- 3.6 Identify twelve potential agriculture or agriculture-related careers.
- 3.7 Identify four potential local labor market area agriculture or agriculture-related careers.
- 3.8 Describe economic and technological trends which may affect the work environment.
- 3.9 Identify ways in which employees may have to adapt to changing work environments.
- 3.10 Explain the importance of work to the individual and society.

Anchor Standards: 3.1-3.8, 4.2, 4.7, 7.3, 7.4
 Career Readiness: 1, 2

4.0 **Goal: Employability**

Developed employment literacy to include job readiness skills and technical reading and writing applications demonstrated by completion of an Employability Portfolio.

- 4.1 Complete an employability portfolio containing the following:
 - a. Table of Contents
 - b. Resume
 - c. Cover Letter
 - d. Master Application Form
 - e. Letter of Recommendation
 - f. Employability Skills Evaluation
 - g. Work Sample and caption
- 4.2 Portfolio Presentation/Interviewing Skills
- 4.3 Participate in an interview situation that includes the presentation of the Employability Portfolio.

Anchor Standards: 11.5
 Career Readiness: 1, 2, 5, 7, 8, 9, 12

5.0 **Goal: Communication**

Exhibited leadership skills related to teamwork, communications, human relations, and community responsibility.

- 5.1 Demonstrate the ability to lead a discussion group.
- 5.2 Identify and demonstrate communication skills using telephones, letters, memos, and through verbal conversations.
- 5.3 Identify and demonstrate the necessary skills to effectively and efficiently work as part of a member on a committee.
- 5.4 Describe the importance of being a good listener.
- 5.5 Identify standards for interview preparation in regards to grooming, behavior, and clothing requirements.
- 5.6 Identify other factors influencing job applicant assessment such as first impressions and eye contact.
- 5.7 Develop a list of frequently asked interview questions.

- 5.8 Discuss the various methods used in interviewing job candidates.
- 5.9 Write two follow-up letters to a job interview.
- 5.10 List and describe the importance of public speaking skills.
- 5.11 Demonstrate public speaking abilities by selecting, researching, developing, and delivering a seven minute sales presentation on an agriculture product.

Anchor Standards: 2.1, 2.2, 2.3, 2.5
Career Readiness: 1, 2

6.0 Goal: Leadership

Develop Personal Growth and Development through a Student Organization (FFA)

- 6.1 Review and practice FFA policies from handbook.
- 6.2 List and describe FFA awards available to members.
- 6.3 Identify FFA contests in which vocational-agriculture students may participate.
- 6.4 List the requirements for earning the Chapter FFA Degree, State FFA Degree, and American FFA Degree.
- 6.5 Complete the FFA student data sheet.
- 6.6 List five characteristics of a critical thinker.
- 6.7 List criteria used to identify when a problem exists.
- 6.8 Identify the nature and specifics of a particular problem.
- 6.9 Define and describe the scientific method of problem solving.
- 6.10 Identify the information needed to solve the problem.
- 6.11 Identify how to locate specific information related to the problem.
- 6.12 List possible solutions to a problem.
- 6.13 Evaluate the consequences of alternative solutions.
- 6.14 Determine the best solution among the alternatives.
- 6.15 Define discussion, disagreement, argument, inference, counterexample, and propaganda.

Anchor Standards: 5.1-5.4, 9.1, 9.9-9.13
Career Readiness: 1

7.0 Goal: Agriculture Research Project

The student will complete an Agriculture Research Project

- 7.1 The student will complete a research project related to the marketing industry that includes the following:
 - written report
 - presentation visuals
 - oral report

Anchor Standards: 2.5, 4.3, 9.7
Career Readiness: 1, 2, 5

8.0 Goal: Scholarships/Higher Education

Student will look at Scholarships/Higher Education

- 8.1 Identify college/university application deadline dates.
- 8.2 Identify the components of the college/university application process.
- 8.3 Students will identify possible scholarships and grants at a college or university for which they apply.
- 8.4 Identify entrance requirements for California Community College, California State University, and the University of California system.
- 8.5 Research and identify financial aid resources, deadlines, and application processes.
- 8.6 Identify different trade institutions, application requirements, and cost of tuition.

Anchor Standards: 3.3, 3.4 Career Readiness: 1, 2, 5

9.0 Goal: Agribusiness Management

Student will discuss different types Agribusiness Management Systems

- 9.1 Describe the four types of business structures found in agriculture: 1. Single Proprietorships; 2. Partnerships; 3. Cooperatives; 4. Corporations.
- 9.2 Discuss similarities and differences among the four types of business structures listed above.
- 9.3 Describe the basic economic factors that affect farm and agribusiness management decisions.
- 9.4 Describe how supply and demand affect prices.
- 9.5 List factors that shift the supply and demand curves.
- 9.6 Distinguish among supplementary, complementary, competitive, and independent enterprises.
- 9.7 List the advantages and disadvantages of diversification and specialization.
- 9.8 Explain the importance of agribusiness and its impact on the gross national product and the total economy.
- 9.9 Use economic decision-making tools to increase the profitability of an agricultural enterprise.
- 9.10 Describe the concept of diminishing returns.
- 9.11 Distinguish between fixed and variable costs.
- 9.12 Calculate the estimated fixed cost and variable costs for an agricultural commodity.
- 9.13 Distinguish between marginal cost and marginal revenue.
- 9.14 Explain what is meant by the term, "free enterprises system."
- 9.15 Describe key factors involved in marketing.
- 9.16 Describe types of markets.
- 9.17 Describe the importance of grades and standards.
- 9.18 Distinguish between hedging and speculation.
- 9.19 Describe the purpose and function of local markets.
- 9.20 Define the terms, "developing," and "developed country," and explain how the level of development affects agriculture and agricultural trade.
- 9.21 Define the purpose of developing a marketing plan.
- 9.22 Identify the various kinds of marketing plans.
- 9.23 Identify the process of developing a marketing plan.
- 9.24 Explain the three essential elements of a marketing program.

- 9.25 Develop a marketing plan for a commodity.
- 9.26 Identify sales careers in agriculture.
- 9.27 Discuss major advantages and disadvantages of a sales career.
- 9.28 List the skills and abilities needed to have a successful sales career in agriculture.
- 9.29 List the four groups of customers who are targeted in agriculture.
- 9.30 Describe the basic function of the sales process in agriculture.
- 9.31 Describe the steps most people go through when making a purchase.
- 9.32 Discuss what motivates people to buy.
- 9.33 Select appropriate questions and methods to identify customer needs and wants.
- 9.34 Identify and explain the five stages in making a sale.
- 9.35 Describe the kinds of information that a sales person needs to have available about a product or service when making a sale.
- 9.36 Discuss the three main sales approaches:
 - Greeting
 - Merchandise
 - Service
- 9.37 Demonstrate three ways of opening a sales presentation.
- 9.38 Give a sales presentation using an agricultural product or service.
- 9.39 Demonstrate effective handling of customer objections in a role playing situation.
- 9.40 Demonstrate effective closing techniques in a sales presentation.
- 9.41 Describe and demonstrate the professional sales process in agribusiness.
- 9.42 Demonstrate the ability to build customer confidence in yourself and your product.
- 9.43 Demonstrate knowledge of advertising and promotion in agricultural sales in an assignment.

Anchor Standards: 1, 10.1, 10.4

Career Readiness: 1

CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A)
1.1-1.6, 2.1-2.6, 7.1, 7.2, 7.4, 8.1-8.3, 9.7

10.0 Goal: Personal Financial Management

The student will recognize different methods of Personal Financial Management

- 10.1 Explain the main reasons for keeping records.
- 10.2 Identify and demonstrate the guidelines for completing a record book.

Anchor Standards: 10.7

Career Readiness: 1

CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A)
4.1, 4.2, 4.4

11.0 Goal: Government Agencies

Students will explore the different types of governmental agencies in the Stanislaus County area.

- 11.1 Identify and describe the primary agencies involved in agriculture and the services they provide.
- 11.2 List the major objectives of the U. S. Department of Agriculture.

- 11.3 Describe the services provided by the Cooperative Extension Service.
11.4 The students will learn and keep records in the California computerized record book.

Anchor Standards: 7.8, 8.2, 10.2, 10.7
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A)
6.1-6.3

12.0 Goal: Industry Explorations

Students will explore the different types of agricultural industries in the Stanislaus County area.

- 12.1 Attend a field trip to research various sectors within the agriculture industry which could include one or more of the following industry areas:
- Dairy Science
 - Water Science
 - Environmental Science
 - Livestock Management
 - Agribusiness
 - Welding and Fabrication
 - Landscape Management
- 12.2 Complete a reflection paper to summarize knowledge learned at the field trip exploration.

Anchor Standards: 1, 10.1, 10.4
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: All pathway standards are integrated within the industry exploration and field study.

13.0 Community Classroom

The student will receive Community Classroom Training

- 13.1 Perform specific skills and tasks relevant to the individual site placement.

Anchor Standards: 1
Career Readiness: 5.4, 11.1
CTE Pathway Agriculture and Natural Resources: Agricultural Business Pathway (A)
8.1-8.3

TEXTBOOK ADOPTION

NAME OF BOOK: AgriScience Explorations, Revised Third Edition &
Activity Manual

AUTHOR(S): Morgan, Lee, Wilson

PUBLISHER: Pearson

COPYRIGHT DATE: 2009

ISBN #: 978-0-13-362637-7 0-13-362637-7 013362644X

PRICE: \$68.97/\$20.97

DEPARTMENT: Agriculture/ROP

CLASS: Agriculture 1 (ROP), Agriculture 2 (ROP), Agriculture 3
(ROP), Agriculture 4 (ROP), Agriculture 5 (ROP)

GENERAL DESCRIPTION:

This newly revised edition provides students with a comprehensive introduction to
the Agriculture industry. Updated photos and easy to understand text introduces
students to a variety of interesting AgriScience concepts and skills including Agri-
Science careers, the relationship between Agriculture and Science, how AgriScience
is applied in the real world, and the meaning of being a professional in the AgriScience
industry.

ASSURANCE OF SOCIAL APPROPRIATENESS: The selection committee has determined that the materials comply with the State of California Standards for Evaluation of Instructional Materials with Respect to Social Content.

APPROVED BY: Agriculture Advisory Committee

Selection Committee:

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