

YOSEMITE REGIONAL OCCUPATIONAL PROGRAM

COURSE OUTLINE

COURSE TITLE: Agriculture 5 ROP S1 Agriculture 5 ROP S2

COURSE NUMBER: ROP01651 ROP01652

RECOMMENDED GRADE LEVEL: 11, 12

DURATION: Two Years

CREDIT: 10 per year

MEETS GRADUATION REQUIREMENTS: Practical Arts

REQUIRED FOR GRADUATION: No

CBEDS CODE: 4098

MEETS UC AND CSU ENTRANCE REQUIREMENTS: No

CREDENTIAL REQUIREMENTS:

REPLACES:

Course Description:

AGRICULTURE 5 is designed to introduce students to careers in production agriculture. Students will receive hands on training in various entry-level positions available in their community. Students will be provided the opportunity to explore various career opportunities in agriculture labor.

Course instruction – This course is designed to introduce students to skills pertaining to jobs in production agriculture. The course instruction and experiences will give students the opportunity to receive instruction and hands-on experience to obtain the skills required to apply for and retain a job in production agriculture in their community. Leadership skills are developed through FFA (Future Farmers of America).

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):

AgriScience Explorations, Activity Manual Instructor's Guide

AgriScience Explorations, Teacher's Manual

ExamView® Test Bank CD-ROM for Comprehensive Titles

Visual Aids on PowerPoint® CD-ROM

SUMMARY OF MAJOR UNITS OF INSTRUCTION

<u>Instruction for Each Unit</u>	<u>Approximate Length (Hours)</u>
A. Orientation	10
B. Career Development	5
C. Employability	15
D. Business/Professional Development	10
E. Leadership	8
F. Agricultural Research Project	5
G. Introduction to Agricultural Skills	5
H. School Farm, Agriculture Shop and General Safety	15
I. Welding/Cutting	10
J. Farm Tractor and Implement Operation	15
K. Basic Introduction to Livestock	10
L. Plant Science	20
M. Agricultural Construction	17
N. Farm Equipment and Tool Identification and Operation	10
O. Community Classroom Training	<u>565</u>
Total	720

Goal 1 Orientation

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

- 1.0 Complete and explain the purpose of the following ROP paperwork
 - a. Socrates Enrollment
 - b. Registration Permit
- 1.2 Demonstrate a clear understanding of attendance, grading, and timecard policies.
- 1.3 OSHA: explain the purpose and function of OSHA in the workplace.
- 1.4 Labor Laws for Teens: identify and explain the labor laws that govern teens in the workplace.
- 1.5 Accident Prevention: emphasize the safety of specific lab sites, the school farm and the agriculture shop.
- 1.6 Identify instances of sexual harassment and provide appropriate solutions to deal with such workplace issues.
- 1.7 Identify, describe, and demonstrate positive work ethics in the workplace.

Anchor Standards: 3.9, 4.6, 6.2-6.7, 11.1, 11.5 Career Readiness: 1, 6

Goal 2 Career Development

Set short and long term occupational goals in a chosen career field.

- 2.0 Explore and describe the levels of career opportunities available to individuals in the Agriculture Mechanics and Production Farming industry.
- 2.1 Complete a self-assessment using the ROP Employability Skills Evaluation form and the ROP "Who Am I" booklet.
- 2.2 Develop a personal occupational plan that outlines specific career goals, and an action plan to achieve these outcomes.

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

Goal 3 Employability

Demonstrated work values consistent with employment success within the industry.

- 3.1 Create an employability portfolio.
 - Complete an employability portfolio containing the following:
 - Table of Contents
 - Resume
 - Cover Letter
 - Master Application Form
 - Letter of Recommendation
 - Employability Skills Evaluation
 - Work Sample and caption
- 3.2 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

Goal 4 Business/Professional Development

Deliver effective communication, and demonstrate the ability to communicate effectively with co-workers, supervisors, teachers, customers, and classmates.

- 4.1 Human Relations: demonstrate effective human relation skills while working with others.
- 4.2 Writing Sample: create a writing sample that demonstrates effective writing and communication skills used in the workplace.
- 4.3 Present Agriculture Research project to an audience determined by ROP instructor.

Anchor Standards: 2.3-2.5, 4.5, 9.3, 9.6, 9.12
Career Readiness: 1, 5

Goal 5 Leadership

Develop leadership skills through the FFA and community service.

- 5.1 Develop and execute a community service project that will be of benefit to a specific group, institution, or cause within the community.
- 5.2 Execute a community service project that will meet the 40 hours of community service requirement for graduation.
- 5.3 Participated in a job interview.
- 5.4 Actively participate in the applicable course student organization such as FFA.

Anchor Standards: 2.3, 2.5, 5.2, 7.2, 9.9
Career Readiness: 1, 7, 8

Goal 6 Agricultural Research Project

Complete a written project and present the topic in class.

- 6.1 Complete a research project related to an agriculture occupation that includes the following:
 - Written Report
 - Presentation Visuals
 - Oral Report or lead a group discussion for 20 min. as required by National FFA Record Book

Anchor Standards: 3.3, 3.4, 3.8
Career Readiness: 1, 2, 9, 11
CTE Pathway Agriculture and Natural Resources: Agriscience Pathway(C) 13.1, 13.2

Goal 7 Introduction to Agricultural Skills

Set short and long term occupational skills

- 7.1 List goals of class and the requirements to obtain them.
- 7.2 List the expected requirements to complete this course.
- 7.3 Explain the grading policy of this course.

Anchor Standards: 3.3
Career Readiness: 1

Goal 8 School Farm, Agriculture Shop and General Safety

The student will have demonstrated safety procedures in the agriculture shop and school farm.

- 8.1 Explain the rules and regulations in relation to safety expectations in order to work at the school farm and in the school agriculture shop.
- 8.2 Explain the proper and safe attire for working at the school farm and in the school agriculture shop.
- 8.3 List the procedures for reporting an accident at the school farm and at the school agriculture shop.
- 8.4 Explain how to safely operate both hand and power tools at the school farm and the school agriculture shop.
- 8.5 List the proper way of handling pesticides safely including use of the correct clothing or personal protective equipment.
- 8.6 Explain how to inspect equipment before operation to identify any safety concerns.
- 8.7 Describe the basics of operating the equipment at the school farm.
- 8.8 Demonstrate safe practices when working with and around livestock.
- 8.9 Demonstrate the proper techniques for handling all species of livestock at the school farm.

Anchor Standards: 6.3-6.6
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics Pathway (B)1.1-1.3, 9.2, 11.2, 6.1, Animal Science Pathway (D)1.1, 1.4

Goal 9 Welding/Cutting

The student will have developed basic skills in Oxy-Fuel and Arc Welding.

- 9.1 Demonstrate proper techniques for the welding and cutting process for Oxy-Fuel welding.
- 9.2 Demonstrate proper techniques for the welding and cutting process for Arc welding.

Anchor Standards: 1.0, 10.1
Career Readiness: 1
CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics (B)7.1-7.4, 8.1-8.4

Goal 10 Farm Tractor and Implement Operation

The student will demonstrate the proper use of equipment

10.1 Demonstrate the safe and proper use of the following equipment:

- Gas and/or Diesel Tractors
- Disc
- Plows
- Cultivators
- Listers
- Scrapers
- Sprayers

Anchor Standards: 1.0, 4.7, 6.4, 10.1

Career Readiness: 1

CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics (B)11.1-11.3

Goal 11 Basic Introduction to Livestock

The student will have demonstrated livestock feeding and healthcare practices.

- 11.1 Recognize and list breeds of the species of livestock at the school farm.
- 11.2 Identify types of feed stuffs and its proper use as livestock feed.
- 11.3 Identify common illnesses in livestock and list types of treatment.
- 11.4 Perform treatments for livestock including shots, drenching, and first aid.

Anchor Standards: 1.0, 10.1

Career Readiness: 1

CTE Pathway Agriculture and Natural Resources: Animal Science (D)2.2, 2.11, 6.1-6.3, 10.1, 11.1, 11.2, 15.1

Goal 12 Plant Science

The student will have demonstrated basic knowledge in plant science application.

- 12.1 List basic plant systems.
- 12.2 List basic nutrient requirements of plants.
- 12.3 Explain types of irrigation used in agriculture.
- 12.4 Describe which type of irrigation practice should be used in relation to a selected crop and soil type.
- 12.5 Describe a fertilizer in reference to its type and how it would be used in agriculture production.
- 12.6 List various types of pesticides.
- 12.7 List what specific pesticides are used to control.
- 12.8 Describe or demonstrate the proper use of pesticides.
- 12.9 Explain various forms of plant propagation.
- 12.10 Demonstrate proper technique for transplanting plants.
- 12.11 Produce a functional vegetable garden using the steps below:
 - Plan

- Prepare
- Plant
- Maintain

Anchor Standards: 1.0, 10.1

Career Readiness: 1

CTE Pathway Agriculture and Natural Resources: Ornamental Horticulture (F)1.1-3, 2.1, 2.3, 3.1, 3.2, 5.1, 5.2, 5.4, 6.1-6.4, 9.3, 9.4

Goal 13 Agricultural Construction

The student will have demonstrated skill in completing farm construction projects.

- 13.1 Demonstrate the proper way to repair, maintain, or construct fences using the following materials:
- Wood
 - Woven
 - Barb Wire
 - Pipe and Cable
 - Electric Materials
 - Gates
- 13.2 Demonstrate or explain how to construct livestock pens.
- 13.3 Explain, using the steps below, how to complete a concrete project:
- Composition
 - Forming
 - Finishing
 - Repairing
 - Job Requirements
- 13.4 Demonstrate safety applications with an electrical project.
- 13.5 List parts identification with an electrical project.
- 13.6 Demonstrate basic electrical wiring skills.
- 13.7 Generate a bill of materials and costs for a project.

Anchor Standards: 1.0, 10.1, 10.8

Career Readiness: 1

CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics (B)2.4, 3.1-3.6, 4.4,6.1-6.3, 9.7, 12.5, 12.6

Goal 14 Farm Equipment and Tool Identification and Operation

The student will demonstrate the proper use of farm equipment and tools.

- 14.1 Demonstrate the safe and proper use of the following equipment:
- Gas and/or Diesel Tractors
 - Disc
 - Plows
 - Cultivators

Anchor Standards: 1.0, 10.1, 10.8

Career Readiness: 1

CTE Pathway Agriculture and Natural Resources: Agricultural Mechanics (B)10.1, 10.2, 11.2, 11.3

Goal 15 Community Classroom

The student will receive Community Classroom Training

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

Anchor Standards: 5.3

Career Readiness: 1

TEXTBOOK ADOPTION

NAME OF BOOK: AgriScience Explorations, Revised 3rd ed. & 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 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 AgriScience 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:

Selection Committee:
Mark Nower, Roger Dickson

Curriculum Area Chairperson

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Director, 7-12, CTE/ROP

Date Board Approved: _____