

R E P O R T R E S U M E S

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A RESEARCH STUDY OF AGRICULTURAL TRAINING NEEDS IN VENTURA COUNTY.

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PUB DATE MAY 67

EDRS PRICE MF-\$0.25 HC-\$1.60 38P.

DESCRIPTORS- *JUNIOR COLLEGES, *AGRICULTURAL EDUCATION, AGRICULTURAL TECHNICIANS, OFF FARM AGRICULTURAL OCCUPATIONS, COMMUNITY SURVEYS, *OCCUPATIONAL SURVEYS, JOB MARKET, EMPLOYMENT OPPORTUNITIES, *EMPLOYMENT TRENDS, CURRICULUM PLANNING, VENTURA COUNTY, CALIFORNIA,

QUESTIONNAIRE RETURNS FROM 103 EMPLOYERS IN AGRICULTURE AND RELATED INDUSTRIES WERE COMBINED WITH 50 INTERVIEWS WITHIN THE SAME GROUP TO PROVIDE INFORMATION ABOUT AGRICULTURAL TRAINING NEEDS IN VENTURA COUNTY. MOST FIRMS EMPLOYED FEWER THAN 15 WORKERS ON A PERMANENT BASIS, SUPPLEMENTED BY LARGE MEMBERS OF SEASONAL WORKERS, ESPECIALLY IN THE CITRUS, AGRICULTURAL CHEMICAL, AND VEGETABLE INDUSTRIES. EMPLOYMENT OPPORTUNITIES RANGED FROM SEMISKILLED JOBS REQUIRING NO MORE THAN HIGH SCHOOL EDUCATION TO THOSE WHICH REQUIRED A 4-YEAR COLLEGE DEGREE. ALTHOUGH THEY SHOWED INTEREST IN EMPLOYING JUNIOR COLLEGE GRADUATES AND IN INSERVICE TRAINING FOR THEIR EMPLOYEES, EMPLOYERS WERE GENERALLY UNFAMILIAR WITH THE COLLEGE'S AGRICULTURAL PROGRAM OR EMPLOYMENT SERVICE. THEY FELT THAT TECHNICAL TRAINING, SUPPLEMENTED BY PROFICIENCY IN ENGLISH, MATHEMATICS, SPEECH, AND SCIENCE, WAS MORE IMPORTANT THAN DEGREE ORIENTED PROGRAMS. RECOMMENDATIONS FOR MODIFYING, DEVELOPING, AND IMPROVING THE COLLEGE'S AGRICULTURAL PROGRAM WERE DEVELOPED FROM THE SURVEY RESULTS. (WO)



A RESEARCH STUDY OF

AGRICULTURAL TRAINING NEEDS IN VENTURA COUNTY

This study was co-operatively sponsored by Ventura College, the Bureau of Agricultural Education, and the Vocational Education Act of 1963.

UNIVERSITY OF CALIF.
LOS ANGELES

MAR 6 1968

By
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Agriculture Department
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CLEARINGHOUSE FOR
JUNIOR COLLEGE
INFORMATION

VENTURA COLLEGE
Ventura, California

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AGRICULTURAL TRAINING NEEDS IN
VENTURA COUNTY**

**Donald F. Rodrigues
Study Supervisor**

**Ventura College
Ventura, California**

**This project was prepared and carried out under
the provisions of the Vocational Education Act
of 1963 in cooperation with the California Bureau
of Agricultural Education and the Ventura Junior
College District.**

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PREFACE

This study proceeds on two premises: that agriculture and the related industries are vitally important, not only to our state, but to Ventura County and the College; and that a Community College, if it is to meet the needs of the community it serves, must be sensitively attuned to every-changing circumstances within the community. The rapid advance in agriculture technology in the past decade hardly needs demonstration; but progress means change and change implies adaptation. The extent to which we can adapt to change is a measure of our success. A study such as this, therefore, permits us to gage the nature and extent of change in agriculture in the community, and to make intelligent modifications in our program to serve students and community with greater effectiveness.

Therefore, the specific purpose of this study is to determine the character of the work force in agriculture in Ventura County, the turn-over or openings annually, the qualifications needed to fill the jobs, the trends in employment opportunities, and the implications for development of curricula at Ventura College.

This study would not have been possible without the interest and active cooperation of the following individuals and groups:

Ventura College Agriculture Advisory Committee composed of the following people:

Edward J. Curran, Chairman
Elvin L. Barnhart
Richard L. Baldwin
Chester J. Barrett
Willard Beckley
Hank Brokaw
Robert Fleckenstein

Kenneth K. Glenn
Dan Kline
Austin Perley
Fred Stewart
John Threlkeld
Thomas P. Vujovich

**Mr. Orley Casella, Ventura College Life Science Division
Chairman**

Mr. Carl Karasek, Former Dean of Instruction

Mr. Alden Phillips, Vocational Coordinator

**Mr. Ken Cutler, Regional Supervisor for the Bureau of
Agricultural Education**

**Dr. Edward Rowins, Former Superintendent of the Ventura
Junior College District**

**Members of the Board of Trustees, College Administration,
and General Faculty**

Special thanks to cooperating firms.

May, 1967

Donald F. Rodrigues

IMPORTANCE OF AGRICULTURE TO VENTURA COUNTY

Ventura is one of the principal agricultural counties of the State of California. Located 50 miles north of Los Angeles, approximately 110,000 acres of land are in irrigated agriculture production. Gross crop value for 1966 amounted to \$147,055,600.00, an increase of more than \$12 million over 1965.

Agricultural commissioner Chester J. Barrett reported that the total increase for 1966 is due to more lemons, strawberries, vegetable acreage, and egg production.

Despite a decrease from 21,289 to 20,770 in total bearing acreage, the production value of lemons rose from \$37,020,300.00 in 1965 to \$40,273,000.00 in 1966. There are 21,824 acres of valencia and navel oranges currently in production. Avocado output jumped from 1.62 to 3.54 tons per acre with 2,661 acres in production having a total value of \$2,430,000.00.

Strawberry acreage increased from 535 to 617 acres. Production per acre also increased. Vegetable acreage jumped from 39,902 to 43,333 with a corresponding increase in total value. Primary vegetable crops are lettuce, beans, green onions, parsley, peppers, spinach, tomatoes, and mushrooms. It should also be noted that vegetable and flower seed production are major industries in Ventura County. Ideal climatic conditions have resulted in good production of various seed crops. Currently, over 1300 acres are in seed production.

Feed-yard cattle increased from \$5,433,200.00 to \$5,929,000.00 but range cattle values dropped. Production in eggs jumped from 33,571,000 dozens to 36,508,000 dozens. Total value for eggs came up \$2,000,000.00 over last year.

Bees were busier in 1966 too, producing 2,489,000 pounds of honey for a total value of \$328,800.00--\$34,000.00 more than in 1965.

Nursery stock production of fruit trees, ornamental plants, and vegetable plants, particularly tomatoes and celery accounted for over \$3,715,000.00 in 1966.

One thousand four hundred sixty acres of cut flowers consisting of chrysanthemums, asters, carnations, daisies, stocks, and gladiolus had a value of \$3,210,000.00.

Following is a list of products in the \$1 million-or-more category in Ventura County:

	1966	1965
LEMONS	\$40,273,000	\$37,020,300
VALENCIA ORANGES	21,293,000	24,014,700
EGGS	12,413,000	10,071,300
CELERY	10,735,000	7,638,300
TOMATOES	8,989,000	6,490,600
CATTLE	7,586,000	7,327,200
STRAWBERRIES	5,773,000	3,692,300
MILK	3,890,400	4,139,000
GREEN LIMA BEANS	3,804,000	3,523,200
NURSERY STOCK	3,715,500	2,447,200
LETTUCE (head)	2,988,000	2,295,600
DRY LIMA BEANS	2,783,000	2,646,000
NAVEL ORANGES	2,782,000	3,790,400
AVOCADOS	2,430,000	1,931,300
CABBAGE	1,644,000	1,661,500
PEPPERS	1,537,000	1,305,670
ROMAINE	1,320,000	1,610,000
WALNUTS	1,169,000	883,200
MUSHROOMS	1,080,000	720,000

A recapitulation of the 1966 crop report as presented by the
Ventura County Agricultural Commissioners office follows:

AGRICULTURAL CROP REPORT RECAPITULATION

1965 - 1966

	YEAR	ACREAGE	VALUE
FRUIT & NUT CROPS	1966	45,099	\$ 74,572,800
	1965	47,951	72,427,400
VEGETABLE CROPS	1966	42,333	34,858,800
	1965	39,902	29,257,670
LIVESTOCK & POULTRY	1966		20,500,000
	1965		17,852,800
FIELD CROPS	1966	20,102	4,979,300
	1965	22,673	4,824,400
DAIRY PRODUCTS	1966		3,890,400
	1965		4,143,800
CUT FLOWERS	1966	1,460	3,210,000
	1965	1,487	3,440,700
NURSERY STOCK	1966		3,715,500
	1965		2,447,200
APIARY PRODUCTS	1966		328,800
	1965		297,800
GRAND TOTAL	1966		\$147,055,600
	1965		134,691,770

PROCEDURE

APPOINTING AN ADVISORY COMMITTEE

An agriculture advisory committee was appointed by the school board on December 7, 1965 to aid the agriculture department with its curriculum development.

Individuals were selected to serve based on these criteria:

- Acquaintance with the problems confronting junior college agricultural programs.
- Knowledge in the various specialized areas of agriculture in Ventura County.
- An understanding of the broad spectrum of job opportunities available and the type of training needed.
- Geographical representation from all districts in the county.
- Representation of the various farming and agricultural business aspects in the county.

Members appointed:

<u>Name</u>	<u>Area Represented</u>	<u>Town</u>
E. L. Barnhart	Citrus	Santa Paula
Richard L. Baldwin	Farm Advisor	Ventura
C. J. Barrett	Ag. Commissioner	Santa Paula
Willard Beckley	Insectary-Pest Control	Santa Paula
W. H. Brokaw	Avocado-Citrus Nursery	Saticoy
Edward J. Curran	Soils Laboratory	Santa Paula
Robert Fleckenstein	Landscape Architect	Santa Paula
K. K. Glenn	Citrus-Livestock	Fillmore
Dan Kline	Landscape Contractor	Montalvo
Austin Perley	Parks Department	Ventura
Fred Stewart	Agri-Business	Santa Paula-Oxnard
John Threlkeld	Wholesale Nursery	Ventura-Thousand Oaks
Thomas Vujovich	Vegetable-Frozen Foods	Oxnard-Canarillo

The advisory committee was asked to give guidance to the agriculture department concerning this study. Specifically they:

- Helped formulate objectives and plans for this study.
- Provided names and addresses of business firms to be contacted.
- Developed survey forms.
- Provided advice in areas of specialization.
- Helped disseminate to the community what was being accomplished.
- Aided in sending the survey forms which included a cover letter requesting the possibility of a follow-up interview.
- Aided in tabulating and evaluating results.
- Prepared recommendations for program development as implicated from survey data.
- Distributed printed results to interested persons and organizations.

ASSEMBLING LIST OF FIRMS TO BE CONTACTED

The first major task of the advisory committee was for each member to compile a list of prospective business firms to be contacted, primarily from his own area of specialization. This data was compiled to form the major mailing list.

DEVELOPING THE SURVEY FORMS

Two major forms were developed. One was mailed to each company to obtain general information about the firm, its employees, and specific job opportunities. Form number two was the interview form designed to follow-up form one for more specific information.

STUDY DATES

The time of the study covered the period from July 1 to September 1, 1966.

STUDY STAFF

The staff consisted of one supervisor, Donald F. Rodrigues, head of the agriculture department, Ventura College. The supervisor was responsible for conducting the survey, interviewing, and preparing results. One clerical assistant was employed to aid in preparing materials and tabulating data.

LIMITATIONS OF THE STUDY

Agriculture covers a broad occupational field. This study made no attempt to concentrate or to focus on particular areas of this vast subject. Rather, the study was organized to investigate the total opportunities and needs in Ventura County from a general standpoint. From this general study, specific needs can be inferred and core programs or "clusters" of courses in various occupational areas developed to meet these needs.

PILOT STUDY

Several questionnaire forms were first prepared and sent to selected companies to test the instrument. Several suggestions and clarifications were indicated. The questionnaire was amended and the final form prepared for mailing.

AREA COVERED

Three hundred and thirty-three business firms located throughout Ventura County were sent the survey form with an accompanying letter of explanation. In the selection of the firms, an effort was made to include a geographical balance as well as a variety of businesses.

RESULTS OF THE SURVEY

Three hundred and thirty three business firms were sent questionnaires. One hundred and three replies were received. Fifty of those returning the completed survey form were selected for interviews. Following is a break down of the firms contacted:

TABLE I

	Questionnaires Sent	Percent of Total	Number Received	Percent Received	Number Interviewed
Ag. Business	20	6 %	5	25 %	2
Ag. Chemicals & Pest	20	6 %	10	50 %	5
Citrus - Avocado	39	12 %	12	31 %	7
Farm Equip. & Supplies	17	5 %	6	35 %	3
Feed & Seed	7	2 %	1	14 %	0
Fertilizers	7	2 %	1	14 %	1
Floriculture	28	8 %	8	29 %	4
Landscape Horticulture	90	27 %	29	32 %	12
Livestock	13	4 %	2	15 %	1
Nurseries	39	12 %	12	31 %	5
Public Service	3	1 %	3	100 %	2
Vegetable Growers	50	15 %	14	28 %	8
Total Sent	333				
Total Received			103		
Percent Received				31 %	
Number interviewed					50
Percent Interviewed	12 %		49 %		

The person interviewed in most cases was the manager or a person in a managerial position. It was felt that this level of representative could more readily supply the type of information sought. An attempt was made to interview representatives of the various firms based on questionnaires received from the various areas, information provided on the questionnaire, and geographical location.

The majority of firms in this study employ fewer than fifteen people on a permanent basis. Many of the firms employ a large number of seasonal workers. This is particularly true in the citrus, agricultural chemical, and vegetable industries. Many, such as in landscape horticulture, indicated a need for part-time help all year round. Approximately 40 percent of the firms hired five or less seasonal or part-time help during the year.

TABLE II
Types of Firms

Employees	Types of Firms												Total
	Ag Business	Ag Chem. & Pest Control	Citrus	Farm Equip. & Supplies	Feed & Seed	Fertilizers	Floriculture Growers	Landscape Horticulture	Livestock, Dairy	Nurseries	Public Service	Vegetable Growers	
Permanent													
1 - 5	3	3		2			4	16		5		2	35
6 - 10	1	3	3	1			2	3	2		1	2	18
11 - 15		1	2	1	1	1		4		3		1	14
16 - 20			2				1			1	1	1	6
21 - 25				1				2				1	4
26 - 50		3	3	1						1	1	5	14
51 - 100	1						1	2		2		2	8
Over 100			2					2					4
													<u>103</u>
Seasonal													
1 - 5	2	5	3	2			4	14	2	3		2	37
6 - 10	2	1	1	1			2	2			1		10
11 - 15						1				1			2
16 - 20		1											1
21 - 25							1	1					4
26 - 50		2	1				1	1		2		2	16
51 - 100			4		1						3	3	8
Over 100			3								3		6
													<u>84</u>

Eighty-seven of the 103 responding firms provided on-the-job technical training. Eighty-eight percent of those interviewed preferred to hire trained people but stated there were no local training programs available.

Seventy percent of the firms felt training for the job was more important than preparing just for a degree. Seventy-five percent of the responding firms preferred to hire junior college trained students. Forty-seven firms offered part-time work, and fifty-eight indicated they would hire agriculture graduates from the junior college program for permanent positions.

TABLE III

Company Training Offered	Types of Firms												
	Ag Business	Ag. Chem. & Pest Control	Citrus	Farm Equip. & Supplies	Feed & Seed	Fertilizers	Floriculture Growers	Landscape Growers	Livestock, Dairy	Nurseries	Public Service	Vegetable Growers	Total
On the Job	5	10	9	3	1	1	7	22	2	11	3	13	87
Company School		1	1	3				2					7
None			2	1			1	4		1		1	10
Other								1		1			2

TABLE IV

Amount of Education Desired By Company for Job Entry	Types of Firms												
	Ag Business	Ag. Chem. & Pest Control	Citrus	Farm Equip. & Supplies	Feed & Seed	Fertilizers	Floriculture Growers	Landscape Horticulture	Livestock, Dairy	Nurseries	Public Service	Vegetable Growers	Total
Four year college	3	8	4		1		2	4		3	2	3	30
Junior college (technical)	3	10	8	5	1		8	26		8	3	7	79
High School	3	5	8	2	1	1	4	14	2	7	2	3	52

Most firms find new employees either by hiring those who come to them or by utilizing the State Employment Service. Only eighteen utilized the college placement office. Few knew about the agriculture program and its offerings. Most companies indicated they would prefer to hire local trained people.

TABLE V

New Employees

State Employment Service	<u>46</u>
Private Agency	<u>14</u>
Advertisement	<u>19</u>
Persons Seeking Jobs on Own	<u>78</u>
College Placement Office	<u>18</u>
Union	<u>5</u>
Other	<u>4</u>

We were delighted by the spirit of cooperation shown by respondents. Forty firms volunteered their facilities for training stations and work experience. Fifty-one offered field trips, and twenty would provide company resources such as speakers, equipment, and materials. Forty-seven would hire part-time help, and seventeen needed summer help. Thirty-seven companies wanted in-service training programs for their present employees.

TABLE VI

How Firms Will Cooperate

Provide Facilities for Training	40
Field Trips	51
Use of Company Resources	20
Personnel	17
Possible Positions for Graduates	58
Part-time Work	47
In-service Training for Present Employees	37
Summer Work	17

The landscape and nursery industry indicated the largest demand for technically trained students. The largest area of employment was in landscape maintenance, sales, general nursery work, golf course maintenance, and arboriculturists. Four hundred and seventeen people are presently employed by the forty-one responding business firms. Eighty-eight current permanent job openings were indicated by these forty-one firms. Also, ninety part-time or seasonal jobs were indicated.

The study indicates that at the present time most full-time work is in golf course maintenance, sales, nursery work, maintenance work, landscape designing, and landscape installation. The average salary range for landscape-nursery work is \$400-\$500 per month. Overall outlook was an increased need for trained men and women.

A primary requirement of the Ventura County citrus industry is for a considerable number of workers in the semi-skilled and unskilled categories. Most jobs require only a high school education, but a few call for junior college training. A junior college program should prepare people for jobs as foremen, ranch managers, mechanics, packing house foremen, and soil-irrigation specialists. Over 403 people are employed full time by the twelve responding firms. The average salaries for trained junior college employees would be between \$350 and \$450. Foremen can expect between \$500 and \$600. Eleven current permanent jobs were listed, and 596 seasonal jobs are available during harvest season. The five-year outlook showed increased needs for trained people in management, packing house operations, mechanics, and harvest crews.

The agricultural chemical and fertilizer industry primarily preferred two-year college trained agriculture students. However, most firms require their technical salesmen and entomologists to have a four-year college degree. The average salary range was \$500-\$600, with many sales jobs paying over \$800 per month. The eleven responding firms indicated sixty-one current permanent job openings. These were primarily for fieldmen, inspectors, technical salesmen, and spray and fertilizer applicators. Five-year outlook called for an increased need for field representatives, technical salesmen, and mechanics.

All responses from the farm equipment and supplies industry indicate they would hire only junior college or college trained students. Fifty-two people in the six companies worked as mechanics, fieldmen, foremen, and salesmen. The average starting salaries were between \$450 and \$550. Seven permanent openings were currently available as mechanics, fieldmen, or salesmen. All companies predicted significantly increased needs for trained help in the next five years.

Floriculture positions are limited to a few middle-management, many low-skilled, and a few top-management workers. The largest area of need was for pickers. Ten openings for junior college trained students were indicated as foremen, greenhouse managers, and salesmen. The average salary range for the above junior college trained jobs was \$450-\$600. Most companies expect all phases of their operations to increase in Ventura County.

Over 80 percent of the agricultural businesses and public service companies desire that employees have a junior college education or better. Most work was in field management, bookkeeping, or inspection. Nine permanent openings are currently available for ranch managers and field supervisors, with average salaries in this group between \$500-\$600. The next five years should see a significant increase in ranch management needs.

The vegetable industry primarily needs trained foremen and fieldmen. Some needs were also indicated in the processing industry; however, unionization is a problem. The largest area of employment for junior college students is as fieldmen, foremen, and equipment operators.

The average salaries for this industry are \$400-\$500. Laborers make about \$100 less, and foremen about \$100 more. The fourteen respondents indicated fifty-seven current permanent job openings, ranging from fieldmen and foremen to laborers. One-half of the responding firms felt that they will be expanding; the other one-half stated that they will remain the same or decrease over the next five years.

The interview portion of the survey brought out the importance of and the need for a better educated labor force. Over and over it was emphasized that technical training is more important than preparing for a degree. Many firms also strongly stressed the importance of proficiency in the basic tool subjects of English, math, speech, and science. Over 70 percent of the firms interviewed felt leadership training to be important.

Eighty-five percent of the respondents pointed out the need for training in the basic agriculture production disciplines followed by more specialized courses leading to proficiency of skills in a specified field.

Fifty percent of the firms preferred employees with farm experience or agricultural education experience. The two areas of overall agricultural education emphasized by the fifty firms were agricultural business and agricultural mechanics. Ninety percent of the firms stressed a need at all levels of employment for more mechanical skills. Power equipment, machinery, and small motors were emphasized. Salesmanship, record keeping, customer relations, merchandising, accounting, marketing, and financing were the areas of agricultural business most needed by students according to employers.

Soils, fertilizers, irrigation, weeds, diseases, entomology, landscape horticulture, farm power, record keeping, and salesmanship were most frequently the subjects desired for in-service training courses.

In-service training classes in landscape installation and maintenance

were requested by nineteen of the landscape firms surveyed. Eighty-five men would attend a program if courses were initiated.

The leading problem in hiring junior college age persons was their age and draft status.

PROGRAM RECOMMENDATIONS

From the foregoing analysis, there is a definite need for agriculturally trained people in the Ventura College District. Employment opportunities are definitely available for the well trained agriculturist. Due to the wide diversity of jobs, core curriculum programs will need to be developed that can prepare students for many available opportunities. It should be noted that most firms prefer to hire college trained students and that work experience should be included as part of the two-year training program.

The main areas of agriculture education stressed by employers are soils, fertilizers, entomology, pest control, irrigation, botany, weeds, crops, mechanics, citrus, agriculture business, and landscape horticulture. General education courses in English, mathematics, public speaking, science, and human relations were highly emphasized by all employers.

There is definitely a need for evening courses or extended day classes in agriculture. Many firms indicated a desire for in-service training programs to up-grade employees currently on the job.

In view of the information contained in this report, certain recommendations for curriculum development at Ventura College are apparent:

- That the college continue to develop an agriculture curriculum designed to meet community needs.
- That programs should be developed that prepare students for job entry with offerings in the extended day or evening program to up-grade skills and prepare for advancements once on the job.
- That courses in agricultural business, mechanics, crop production, citrus and packing house management, turf, landscape construction, practical botany, and the basic agricultural sciences be initiated.

- That core curricula be prepared which include basic as well as specialized courses in major areas. Emphasis should be on curricula that prepare for a wide spectrum of job opportunities with more need for the plant sciences and agricultural mechanics than on the animal sciences.
- That more students be urged to take math, science, English, speech, and business courses.
- That specific curricula for job entry be developed in landscape horticulture, citrus-avocado management, crop management, agricultural business, and agricultural mechanics.
- That the agriculture department should require term papers, reports, essay exams, oral reports, and math problems to stimulate thinking in this area.
- That a work experience program be promoted and all agriculture majors encouraged to participate.
- That the evening program be expanded to include in-service training classes; the first program to be initiated should be in landscape maintenance.
- That all efforts to acquaint the community with the junior college program should be taken. Only eighteen firms listed the college as a source of new employees.
- That the agriculture department should prepare a brochure to aid in counseling and guidance of students.
- That students should be encouraged to participate in school activities including the agriculture club in order to develop training in responsibility, cooperation, leadership, and citizenship.
- That additional surveys should be taken periodically in specific agriculture areas to obtain continued up-to-date information.
- That a close liaison with prospective employers should be maintained by the college.
- That a planned follow-up program on students should be developed and maintained.
- That the Agricultural Advisory Committee should be maintained.
- That this report should be sent to schools, employers, business firms, and others who would be interested in agricultural education.
- That the college should provide adequate classrooms, laboratories, equipment, and staff to carry out expanded programs.

APPENDIX

Appendix I
VENTURA COLLEGE



Phone 642-3211
(Area Code 805)

VENTURA COUNTY JUNIOR COLLEGE DISTRICT

4667 Telegraph Road
Ventura, California
93003

July 6, 1966

Dear Sir:

During the next few weeks, a survey of job opportunities for trained high school and junior college agriculturists will be conducted in Ventura County. This work is being carried out by the Ventura College Agriculture Department and its Agricultural Advisory Committee.

As you know, Agriculture is changing rapidly in our county. Many Agricultural employers have indicated to us a need for a better trained work force with more skill and technical knowledge than was previously required. We would like to train competent people for your needs. This survey will be important to you and to us in preparing curriculum and students for the many Agricultural occupations you indicate.

We believe there are many jobs available in Agriculture and related fields and would appreciate your cooperation in providing up-to-date information on Agricultural employment. Please complete the attached questionnaire and return it to the Ventura College Agriculture Department in the enclosed envelope. Within two weeks we will contact several of the responding companies for a personal interview for more detailed information.

Thank you for your interest and prompt response.

Sincerely,

Ed Curran, Jr.
Chairman, Agricultural Advisory Committee

Donald F. Rodrigues
Head, Agriculture Department

VENTURA COUNTY AGRICULTURAL SURVEY

- A. Name of Company: _____ Address: _____
- B. Type of Business: _____
- C. Respondent (Name): _____ Title: _____
- D. Number of employees (approximate) _____ 1. Permanent
_____ 2. Seasonal (in addition to permanent)
- E. Where do you find new employees?
- _____ 1. State Employment Service _____ 4. Persons seeking jobs on their own
_____ 2. Private Agency _____ 5. College Placement Offices
_____ 3. Advertisement _____ 6. Other
- F. Is there a need for training programs where the emphasis is on technical training for the job?
- _____ 1. Yes _____ 2. No. Comment:
- G. Where do you believe these training activities can be accomplished in a school program? _____ 1. High School _____ 2. Junior College
- H. If skill training were offered in our high school programs, would you cooperate?
- _____ 1. Yes _____ 2. No. _____ 1. Provide facilities for training
_____ 2. Field trips
_____ 3. Use of Company resources
_____ 4. Personnel
_____ 5. Possible positions for graduates
_____ 6. Part-time work
_____ 7. In-service training for present employees
_____ 8. Other (specify)
- I. If Ventura College initiates a program to train technicians in your field would you cooperate in this program? HOW?
- _____ 1. Yes _____ 2. No. _____ 8. Other (specify)
- J. Does your company provide any kind of training for employees?
- _____ 1. On-the-job _____ 2. Company school _____ 3. None _____ 4. Other Comment:
- K. Can we return for more information? _____ 1. Yes _____ 2. No
- L. Please make additional comments concerning areas of instruction or types of training that are needed in your business.

On page two of this survey form you are asked to compile a list of specific job titles, present and future job opportunities, and a list of job types by scholastic backgrounds required.

JOB OPPORTUNITIES: BROKEN DOWN BY SCHOLASTIC BACKGROUND REQUIRED

A. High School Diploma

JOB TITLE	No. of Positions Presently Filled			Present Job Openings Available		Five Year Outlook Percent		
	Male	Female	Permanent	Seasonal	Salary Range	Increase	Decrease	Same
1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								

B. Junior College 1 - 2 Years

1.								
2.								
3.								
4.								
5.								
6.								
7.								
8.								
9.								
10.								

C. College Degree

1.								
2.								
3.								
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9.								
10.								

INTERVIEW FORM

VENTURA COUNTY AGRICULTURAL SURVEY

1. Recommended procedure for employee to receive pre-employment training or background in agriculture:

- 1. Actual farm experience important
- 2. Actual farm experience not important
- 3. Vocational agriculture H.S. level
- 4. Agriculture in junior college
- 5. Agriculture in college
- 6. On the job training with company such as yours
- 7. Other _____

2. Specific areas of agriculture training most needed by employees.

- 1. Farm experience
- 2. Shop skills
- 3. Citrus production
- 4. Crop production
- 5. Economics of farming
- 6. Agri-business
- 7. General agriculture
- 8. Landscape horticulture
- 9. Other (specify)

3. Training other than agriculture that is needed by each level of this group of employees.

- 1. Written English
- 2. Speech
- 3. Literature-classics
- 4. Foreign languages
- 5. Mathematics, physics, sciences
- 6. Leadership training
- 7. Business education
- 8. Sales training
- 9. Other _____

4. Area or areas of agri-business or business education most needed by each group of employees.

- 1. Salesmanship-customer relations
- 2. Principles of business operation
- 3. Understanding of business finance
- 4. Familiarity with accounting systems used by business
- 5. Knowledge of credit, mortgages and loans.
- 6. Merchandising training (buying, stocking, etc.)
- 7. Understanding of typical organizational set-ups of business
- 8. Appreciation of the place of small and large business in our economic systems.
- 9. Advertising, display training
- 10. Familiarity with vocational opportunities in business

5. Leading problems to be encountered in employing interested high school or junior college age persons in your organization.

- _____ 1. Liability insurance
- _____ 2. Labor union regulations
- _____ 3. Time to train employees
- _____ 4. Turnover of employees
- _____ 5. Age
- _____ 6. Other _____

6. Type of in-service courses desired.

Plant Science

Soils
Fertilizers
Irrigation
Weeds and Diseases
Entomology
Ornamental Horticulture

Ag. Mechanics and Engineering

Farm Machinery
Farm Power
Welding
Tractors
Irrigation pumps & systems
Hydraulics
Electricity

Agri-Business, Economics, Management

Economics
Salesmanship
Records & Record keeping
Farm law
Marketing

Comments:

AGRICULTURE JOB DESCRIPTION FORM

TECHNICAL TRAINED JOBS FOR JUNIOR COLLEGE STUDENTS

FIRM:

JOB TITLE:

JOB DESCRIPTION:

PHYSICAL SKILLS AND/OR ABILITIES REQUIRED:

EXPERIENCE OR TRAINING REQUIRED:

WRITTEN SKILLS REQUIRED:

VERBAL SKILLS:

ORGANIZATIONAL ABILITIES, OR DECISION MAKING ABILITIES REQUIRED:

MANAGERIAL AND PERSONNEL MANAGEMENT SKILLS:

APPROXIMATE STARTING SALARY:

MISCELLANEOUS COMMENTS:

Appendix II

COMMENTS

- "I look at various residences every day and prepare landscape plans or advise on problems from sick lemons to dead plants."
(Nurseryman)
- "Math is our biggest weakness in agricultural education."
(Fertilizer Salesman)
- "I have to talk to farmers, businessmen, workmen, and others, yet I feel one of my weaknesses is speech."
(Equipment Manager)
- "Entomology is greatly needed in our work."
(Chemical Sales)
- "Students need to have a basic understanding of farming."
(Farm Manager)
- "Mechanics with ability and skill are hard to obtain."
(Equipment Supply)
- "Have to obtain the farmers confidence in your agriculture technical knowledge."
(Salesmen)
- "A lot of our work deals with records and bookkeeping. Every student should take business, English, and math courses."
(Fieldmen)
- "Our shop is the backbone of our business. We need well trained mechanics in farm equipment and machinery."
(Chemical and Fertilizer Foremen)
- "I prefer to hire those that have an agriculture background, particularly if they were in the F.F.A. program."
(Chemical Company)
- "The technical knowledge is more important than a degree."
(Golf Course Superintendent)
- "Working with others rates high in my book."
(Packing House Manager)
- "I need help that can wait on customers intelligently."
(Sprinkler Company)
- "Training for any job is more important than for the sake of a degree."
(Seed Company)

- **"Soil laboratory technicians are highly needed. I can't even find a qualified four-year soils technician."
(Soil Laboratory Manager)**
- **"Give me a student who wants to work and learn. I'll take him any day over someone who has just a degree."
(Parks Superintendent)**
- **"I need a citrus fieldman today. We have been looking for the right man for over three months."
(Fertilizer-Chemical Company)**
- **"There is only one school in California that trains tree men. Most men learn on the job. We would hire all you can train."
(Tree Company)**
- **"Our greatest need is keeping our current employees up to date."
(City Parks Office)**
- **"If the college establishes evening courses in basic maintenance, we will send our entire crew."
(Highways Landscape Division)**
- **"Have to write up reports daily. Wish I had had more English and writing skills."
(Agricultural Inspector)**
- **"A college trained person is more desirable in our work."
(Citrus Ranch Manager)**
- **"Men are needed who are mechanically inclined, can drive a tractor and are able to think for themselves."
(Vegetable Farmer)**
- **"Diversification and land expansion will increase our employment needs for the future."
(Citrus Ranch)**
- **"Students should be trained in basic plant science and propagation."
(Wholesale Nurseryman)**

Appendix III

SAMPLE EMPLOYMENT OPPORTUNITIES

<u>Agriculture Area</u>	<u>No. of Firms</u>	<u>Sample Firms</u>	<u>Employment Opportunities</u>
Ag Business	20	Fruit Growers Lab Valley Orchard Service Hoffman, Vance, & Worthington	Ag Inspection Lab Technician Ranch Manager
Ag Chemicals & Pest Control	20	Associates Insectary Chevron Chemical Company Coastal Chemical Company	Entomologist Technical Sales Field Inspection
Citrus-Avocado	39	Limoneira Company CALAVO Growers Ojai Orange Association	Soil-Irrigation Foremen Mechanic Packing House Aides
Farm Equipment & Supplies	17	Joseph Powers Company, Inc. Power Tractor Company Pipco Irrigation	Mechanic Shop Foreman Irrigation Specialist
Feed & Seed	7	W. Atlee Burpee Company Peto Seed Company Moorpark Milling Company	Production Manager Hybridist Equipment Operator
Fertilizers	7	Mission Fertilizer Company Agri-Serv Shell Chemical	Salesmen Production Management Mechanic
Floriculture Growers-Florists	28	Nobel Floral Company Ojai Valley Florists Las Posas Flower Growers	Sales Fieldmen Greenhouse Management
Landscape Horticulture	90	County of Ventura Central Landscape Construction Company Saticoy Country Club	Landscape Installation Turf Maintenance Landscape Maintenance
Livestock	13	Taylor Feedlot Ahdor Farms Berlywood Investment	Dairymen Feed Lot Manager Fieldmen
Nurseries	39	K. M. Nursery, Inc. Conejo Treeland Ventura Nursery	Salesmen Propagator Grower
Vegetable Growers	50	Coastal Valley Canning Co. Gentry Corporation Oxnard Frozen Foods	Research Equipment Operator Fieldmen Quality Control

Appendix IV

PROPOSED AGRICULTURE PROGRAM

This proposal will meet our current agricultural community needs.

All courses will primarily be geared to the two-year occupational student.

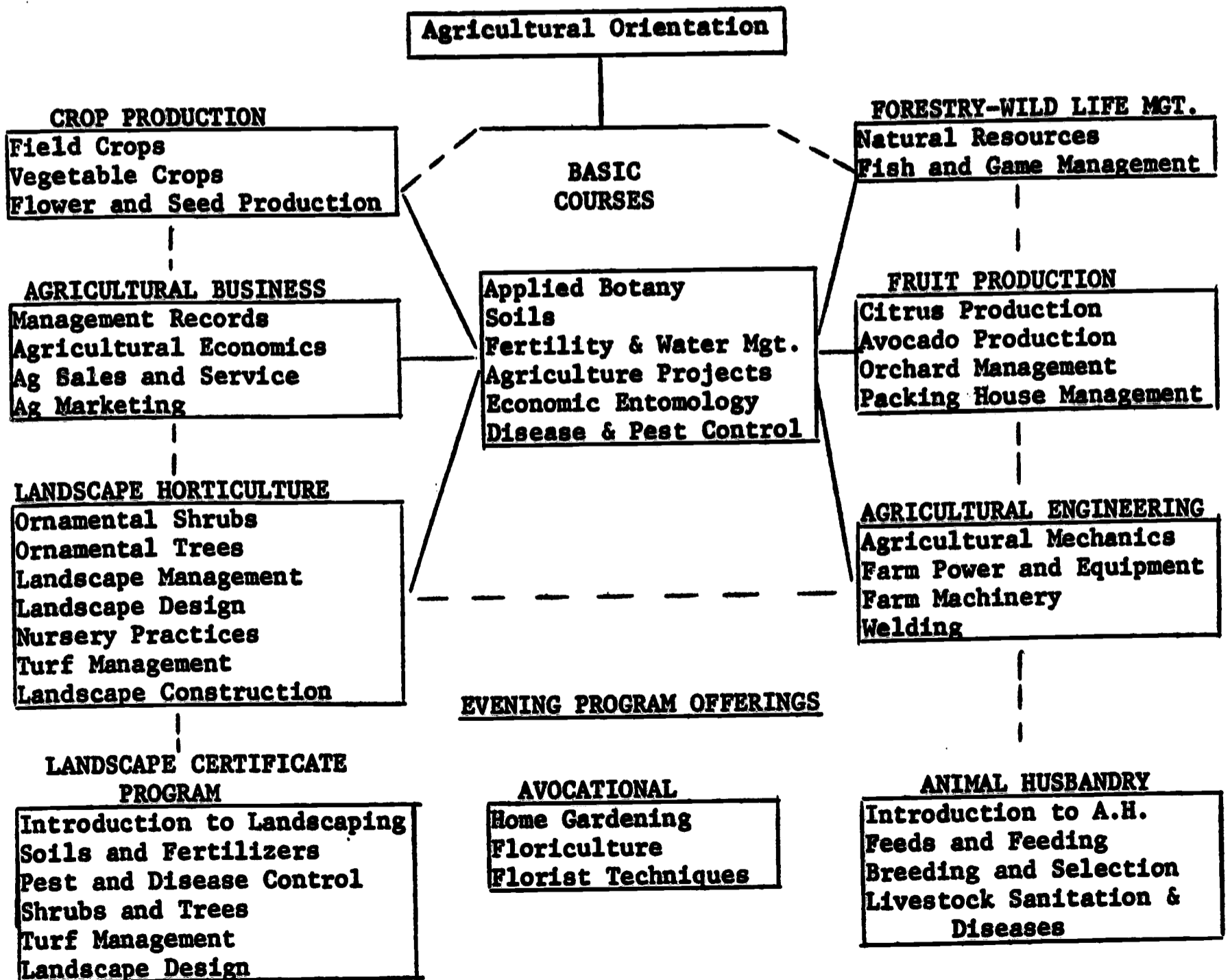
All courses will transfer to colleges offering agriculture.

This proposal will include a basic "core" curriculum with specialization in the various major agriculture fields.

The agriculture program will be primarily orientated to the plant sciences with agricultural mechanics and animal husbandry as secondary areas of instruction.

The following majors can be provided by offering these proposed courses:

- Agriculture Inspection
- Agriculture Sales and Service
- Agriculture Mechanics and Engineering
- Forestry, Wildlife, and Game Management
- Citrus and Avocado Management
- Crop Production
- Agricultural Business
- Farm Management
- Landscape Maintenance
- Landscape Management



RECOMMENDED CURRICULA

OCCUPATIONAL

GENERAL EDUCATION PATTERN

<u>Freshman Year</u>	<u>Units</u>	<u>Sophomore Year</u>	<u>Units</u>
Orientation	0	Speech 15	3
Engl. 3A-3B	6	Poli Sci 4A-4B	4
Psychology 9	3	P.E. 3 - Health Ed.	2
P.E.	1	Music 7 or Art 3	2
Bus 6 (Bus Math)	3	P.E.	1
*Agriculture	18	*Agriculture	18

*To be selected depending on major area

AGRICULTURE SALES & SERVICES

Management Records
 Agricultural Economics
 Agricultural Sales &
 Services
 Agricultural Marketing
 Applied Botany
 Soils

Fertility & Water
 Management
 Economic Entomology
 Disease & Pest Control
 Farm Power & Equipment
 Field Crops
 Vegetable Crops

Flower & Seed Production
 Nursery Practices
 Citrus Production
 Avocado Production
 Agricultural Mechanics
 Farm Machinery

AGRICULTURE INSPECTION

Field Crops
 Vegetable Crops
 Flower & Seed Production
 Agricultural Sales &
 Services
 Management Records
 Ag Projects

Applied Botany
 Soils
 Economic Entomology
 Disease & Pest Control
 Nursery Practices

Citrus Production
 Avocado Production
 Agricultural Mechanics
 Orchard Management
 Ornamental Shrubs & Trees

AGRICULTURAL BUSINESS

Management Records
 Agricultural Economics
 Agricultural Sales &
 Services
 Agricultural Marketing
 Fertility & Water
 Management
 Ag Projects
 Economic Entomology

Disease & Pest Control
 Agricultural Mechanics
 Welding
 Vegetable Crops
 Nursery Practices
 Applied Botany
 Soils

Citrus Production
 Avocado Production
 Orchard Management
 Packing House Management
 Farm Power & Equipment
 Farm Machinery

LANDSCAPE MANAGEMENT

Applied Botany
Ag Projects
Fertility & Water
Management
Economic Entomology
Disease & Pest Control
Management Records

Agricultural Sales &
Services
Ornamental Shrubs
Ornamental Trees
Landscape Management

Nursery Practices
Turf Management
Landscape Construction
Agricultural Mechanics
Soils

CROP PRODUCTION

Applied Botany
Soils
Fertility & Water
Management
Ag Projects
Economic Entomology

Disease & Pest Control
Field Crops
Vegetable Crops
Flower & Seed Production
Management Records

Agricultural Mechanics
Farm Power & Equipment
Farm Machinery
Welding

FARM MANAGEMENT

Applied Botany
Soils
Fertilizers
Ag Projects
Economic Entomology
Disease & Pest Control
Citrus Production

Avocado Production
Orchard Management
Packing House Management
Vegetable Crops
Field Crops
Flower & Seed Production
Management Records

Agricultural Economics
Agricultural Marketing
Agricultural Mechanics
Farm Power & Equipment
Farm Machinery
Welding

CITRUS AND AVOCADO MANAGEMENT

Applied Botany
Soils
Fertility & Water
Management
Ag Projects
Economic Entomology
Disease & Pest Control

Management Records
Agricultural Economics
Agricultural Marketing
Citrus Production
Avocado Production
Orchard Management

Packing House Management
Agricultural Mechanics
Farm Power & Equipment
Farm Machinery
Welding

VENTURA COLLEGE

Office of the Dean of Admissions and Guidance

**LANDSCAPE MAINTENANCE
(1-year technical certificate program)
30 units**

NAME _____ **COUNSELOR** _____ **MAJOR** _____ **DATE** _____
CODE _____ **CODE** _____

This program will prepare individuals for the following careers:

Golf Course Caretaker

Park Maintenance Foreman

Maintenance Man

Nursery Worker

Highway Landscape Man

Maintenance Foreman - State, County, City

Landscape Contractor Aide

Recommended Courses

Ag	3	Applied Botany	3
Ag	41	Nursery Practices	3
Ag	44	Landscape Management	3
Ag	46	Turf Management	3
Ag	47	Landscape Construction	3
LM	92	Soils and Fertilizers	3
LM	93	Ornamental Pest and Disease Control	3
LM	94	Ornamental Shrubs and Trees	3
English		English as Couseled	3
Spch	15	Intro to Speech	3
Bus	6	Business Math	3

**TRAINING PROGRAM
IN
LANDSCAPE INSTALLATION AND MAINTENANCE**

A specialized program designed for those employed or desiring employment in professional landscaping. Recommended for those engaged or desiring employment in school, public building, parks, freeway, golf course, or residential and private building landscape work.

A certificate of completion will be presented by Ventura College to those who satisfactorily complete this program.

LM 91	PRINCIPLES OF LANDSCAPE MAINTENANCE	
	An exploratory course in the fundamentals of landscape installation and maintenance operations.	3 units
LM 92	SOILS AND FERTILIZERS	
	Plant, soil, water, and fertilizer relationships	3 units
LM 93	ORNAMENTAL PEST AND DISEASE CONTROL	
	Plant pests and diseases, their recognition, damage, and control. Insects, weeds, rodents, diseases.	3 units
LM 94	ORNAMENTAL SHRUBS AND TREES	
	Identification and uses of common landscape shrubs and trees in Ventura County.	3 units
LM 95	TURF MAINTENANCE	
	Identification, uses, and maintenance of turfgrasses in California and Ventura County.	3 units

Recommended additional courses:

Sup 90	Elements of Supervision
Sup 92	Human Relations
Bus 6	Business Math
	English
	Speech