

**Office of the President
California State University, Chico**



Executive Memorandum 21-004

February 23, 2021

From: Gayle E. Hutchinson, President

Subject: Approval of Significant Changes and a Name Change to the BS in Agriculture

Upon the recommendation of the Academic Senate, with the concurrence of the Provost, and with the approval of the Chancellor's Office, I approve Significant Changes and a name change to the BS in Agriculture. The name of the major will change to the **Bachelor of Science in Agricultural Science** and the number of units will change from 78 to 78-82. The CSU degree program code will remain 01011, with a paired CIP code of 01.000. These changes will be effective fall 2021.

Policy Title:	EM 21-004 Approval of Significant Changes and a Name Change to the BS in Agriculture
Contact:	College of Agriculture
Supersedes:	
Revision:	
Enabling Legislation or Executive Order:	

Academic Programs, Innovations and Faculty Development
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Assistant Vice Chancellor and State University Dean,
Academic Programs
Phone 562-951-4147
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February 12, 2021

Dr. Debra Larson
Provost and Vice President for Academic Affairs
California State University, Chico
400 West First Street
Chico, California 95929

Dear Debra:

Effective fall 2021, California State University, Chico is authorized to change the title of the Bachelor of Science in Agriculture to Bachelor of Science in Agricultural Science. The CSU degree program code will remain 01011 and the associated CIP Code will remain 01.0000.

Thank you also for notification of the new concentration in Agricultural Communication and Leadership.

Degree	Degree/CIP Code	Concentration	Concentration/CIP Code
BS Agricultural Science	01011/01.0000	Agricultural Communication and Leadership	01015/01.0802

The campus is responsible for making the appropriate changes to the CSU Degrees Database and to the campus academic plan.

If you have questions, please contact me at mlavitt@calstate.edu.

Sincerely,



CSU Campuses
Bakersfield
Channel Islands
Chico
Dominguez Hills
East Bay

Fresno
Fullerton
Humboldt
Long Beach
Los Angeles
Maritime Academy

Monterey Bay
Northridge
Pomona
Sacramento
San Bernardino
San Diego

San Francisco
San José
San Luis Obispo
San Marcos
Sonoma
Stanislaus

February 12, 2021

Page 2

Melissa R. Lavitt, Ph.D.
Assistant Vice Chancellor and
State University Dean, Academic Programs

MRL/dc

c: Dr. Loren J. Blanchard, Executive Vice Chancellor for Academic and Student Affairs
Dr. Daniel Grassian, Vice Provost for Academic Programs
Dr. Kate McCarthy, Interim Dean of Undergraduate Education

Undergraduate Program Significant Change

Program Name: Agricultural Science

Program named above is (complete only if applicable):

- Option within _____
(degree program name)
- Minor
- Certificate

Will proposed changes affect Transfer Model Curriculum? Yes No If yes, explain:

Will proposed changes affect a subject matter preparation or credential program? Yes No
[EM 07-012](#)

Department Contact(s) w/phone #(s):
Mollie Aschenbrener (530-520-6018)

Required Signatures

The Department of n/a
has reviewed and approved these significant changes

<u><i>Celina Phillips</i></u> Chair, Department Curriculum Committee	<u>11/4/2020</u> Date
<u><i>Eric Houk</i></u> Department Chair	<u>11/9/2020</u> Date

The College of Agriculture
has reviewed and approved these significant changes

<u><i>Celina Phillips</i></u> Chair, College Curriculum Committee	<u>11/4/2020</u> Date
<u><i>John Unruh</i></u> College Dean	<u>11/09/2020</u> Date

Note: The department will be notified of the of dates for EPPC, Academic Senate, and Chancellor's Office review.

Proposal for Significant Changes

I. Program name and level (undergraduate or graduate)

Existing name: BS in Agriculture

Proposed name: BS in Agricultural Science

An additional proposal has been submitted for the name change. However, this name was selected for the degree given “agriculture” is very general. With the acceptance of the proposed options, a general degree is no longer an option. The previous degree had the majority of units within the option, allowing students to complete a wide variety of courses in agriculture. However, given the requirement to change, the new degree must meet more specific criteria for agricultural education (and agricultural communication and journalism if approved). The degree title of agricultural education would seem logical, however, it is not allowed in the CSU system given the term education is only allowed when offered from a College or School of Education. The most common name for degree programs within agricultural education is Agricultural Science, thus this name was selected for the proposal degree name.

A. Academic year of intended implementation.

2021-2022

B. Name of the department and college submitting the proposal.

1. Identify the unit which will have primary responsibility for the program.

College of Agriculture; Agricultural Science

2. Name, title, and rank of the individual(s) primarily responsible for drafting the proposed program change.

Mollie Aschenbrener, Professor

3. How many declared students are currently in the program.

130

II. Provide an **abstract**, no longer than one page, that describes why you are making these changes and how they are related to the University [Strategic Plan](#), the [Academic Plan](#), the [Diversity Action Plan](#) (see definition and Task 3.1) and your most recent academic program review (i.e. Five Year Review or Accreditation).

The purpose of this proposal is to develop a revised undergraduate degree in agricultural science, including options in agricultural education and communication. The desire to create a revised degree stems from both professional demand for secondary agricultural education teachers and the need to be compliant with the Chancellor’s Executive Order (EO) 1071. Currently, the program is in violation of EO 1071 given the number of units required for the option in agricultural education under the existing degree. This proposal supports the revision to the existing degree submitted by faculty in the CSU, Chico College of Agriculture in the area of plant and soil science.

In the past seven years, CSU, Chico credential candidate numbers have increased from 11 program completers (defined as students completing the teaching credential program) in the spring of 2012 to an anticipated 30 in the 2020-21 academic year. Factors that have influenced growth include university and college wide growth, a strong promotion and recruitment effort and the recognized teacher demand and shortage.

However, the increased number of program completers has yet to meet the demand for high school and community college instructors statewide (). Teacher vacancies are a result of many factors including retirements, teachers leaving the profession and program expansion (Foster, Lawver & Smith, 2020). It is anticipated that the demand will actually grow with the inclusion of junior high school FFA members in the California FFA Association. It is evident that there is a tremendous need for properly trained agriculture teachers across California.

In addition to the growth in agricultural education, the area of agricultural communication continues to displace unprecedented student demand. Originally an option, the degree in Agricultural Communications at Cal Poly, San Luis Obispo grew from 51 students enrolled in 2013 to 139 students in 2016. Given the feedback from secondary students at College of Agriculture events, there is substantial interest in agricultural communications. The ability to offer this as an option, which utilizes existing courses and instructors, prior to proposing a full degree allows CSU, Chico to determine if antidotal evidence would support significant interest in this career area.

This proposal addresses the Strategic Plan of the University, specifically addressing strategic priorities one, three, four, and five. The desire to develop high-quality learning environments, both inside and outside the classroom (priority one), is paramount to this proposal. A degree in agricultural science with options in agricultural education and communication will combine resources from the College of Agriculture, the School of Education, and the Department of Journalism and Public Relations, strengthening both cross-campus collaboration and the learning environment. The opportunity for students to be involved in a wide range of service events expands the impact beyond the classroom.

The option in Agricultural Education and the option in Agricultural Communication and Leadership would address the desire to provide the technology, related training, and the support needed to create high quality learning environments both inside and outside of the classroom (priority three). Technology is an essential component of both agricultural education and agricultural communication and will be strengthened by using resources from multiple programs.

The revised degree program would also meet the needs of the North State (priority four). Specifically, CSU Chico is on the only University in the North State and one of only five institutions that prepares secondary agricultural teachers. Currently, there are no options for students in the North State to pursue agricultural communications despite a substantial agricultural presence in this geographic area.

Further, the program seeks to be an example of effective resources for the state (priority five) as we pursue a unique and innovative approach to creating an option served by two colleges.

III. Resources and program support.

A. Indicate additional faculty or staff support positions needed to implement the program changes.

Additional faculty or staff support positions will not be required to implement the program changes at this time. However, if increased student enrollment merits,

additional faculty may be necessary. With consultation from both College administrations, an estimated 50 new students enrolling in the Option in Communication and Leadership may suggest a need for an additional faculty member. Continued growth in the Agricultural Education program may also merit additional faculty as deemed necessary by the College of Agriculture.

- B. Indicate changes in or additional space and facilities that will be needed.
No additional requests for space, including faculty offices or classroom will be required, as the scope of the program will not change in the initial launch of this degree change and additional option. All courses included in the program are currently being offered. However, if additional student enrollment increases and additional faculty are deemed necessary, anticipated faculty space may be required.
- C. List additional library resources, equipment, and other specialized materials that will be needed. Provide evidence of consultation with the Library Dean indicating that the program can be supported by the library.
No additional library resources, equipment, or other specialized materials will be required. Provide evidence of consultation with the Library Dean indicating that the program can be supported by the library.
Please see page 18 for a statement from the Library Dean.
- D. A statement from the responsible administrator(s) should be attached to the proposal. This statement should indicate a commitment to provide resources to support the program.
Please see page 19 for a statement from the Dean of the College of Agriculture in support of this proposal. Please see page 20 for a statement from the Associate Dean from the College Communication and Education.

IV. Program details.

- A. For undergraduate degree programs, is the degree matched to an associate degree as “similar” according to SB 1440? If so, please explain how the proposed changes will affect the Transfer Model Curriculum (TMC). If you have questions or need help please contact the Articulation Officer in the Office of the Registrar.
There are existing similar designations between the Option in Agricultural Education and 3 AS-T degrees: Agriculture Animal Sciences, Agricultural Business, and Agricultural Plant Sciences. The option allows for lower division agriculture elective courses that are transferable from community colleges. This is the least prescriptive of all major/options in the College. However, given the substantial number of courses (primarily upper division units) required to meet both credential prerequisites and subject matter competency required to obtain two credentials in Agricultural Education, AS-T agreements will no longer be applicable. As such, the *Request for Removal of Transfer Model Curriculum (TMC) Similar Program Designation*, is currently being created and will be submitted to the Chancellor’s Office.

Additionally, CSU Chico has similar designations to the TMC in ABUS and ANSC with other Chico majors, so students with those TMCs still have options at Chico.

As a new option, there are no existing AS-T agreements in agricultural communication and leadership. Thus, the Option in Agricultural Communication and Leadership would not serve AS-T agreements. Students would not be able to graduate in 60 units, but can graduate in two years with advising and careful course planning, a strong area of success for both the College of Agriculture and the College of Communication and Education.

- B. Total number of units required for the revised program. Indicate if this is a change from the current number of units and the reason for the change. If this is a high unit program, please indicate whether you will be asking for any modification for General Education requirements.

The total number of units required for degree will be 120 for the Agricultural Education Option and 120 units for the Option in Agricultural Communication and Leadership. This number of units will accommodate credential pre-requisites and maintain academic rigor through the required subject matter competency required for a credential in agricultural education.

To maximize the use of coursework for the program, additional double counting of General Education (GE) courses has received approval. Following the model established by Music and Math, this proposal supports double counting Single Subject pre-requisite courses for upper division GE Areas C and GE Area E.

Beyond the use of double counting GE courses to assist students reaching degree completion in four years, the Agricultural Education Program actively participates in student advising. In addition to the mandatory advising required by the College of Agriculture, students are engaged by faculty in advising night programs centered around the needs of each type of student (transfers, freshmen, etc.). Students receive frequent communication and resources to plan a course load the will allow them to meet both subject matter competency requirements and credential prerequisite requirements.

Table 1: Proposed Courses Counting for General Education:

GE Double Counts- AG ED Option	GE Area	Units
CHEM 107	B1	4
AGRI 482	UD-D	3
PSSC/ANSC 101	B2	3
EDTE 451	E	3
ENGL 471	UD-C	3
Total:		16

GE Double Counts- AG Communication & Leadership Option	GE Area	Units
CHEM 107	B1	4
PSSC/ANSC 101	B2	3
ABUS 101	D1	3
CMST 235/ JOUR 255	E	3
AGRI 482W	UD-D	3
Total:		16

Double counting required credential courses follows the pattern of music and math without eliminating core education courses pertinent to developing teacher candidates.

Agriculture and Journalism already have a number of courses that meet GE requirements (see Table 2).

Table 2: Existing Courses Counting for General Education:

B2	PSSC 101
D1	ABUS 101
Capstone/UD-D	AGRI 482
UD Writing	JOUR 341W

- C. List courses required for the program that are added, deleted, or changed. Mode of delivery is either regular, on-line, or hybrid. More than one mode of delivery can be indicated. Please add rows as necessary with one row for each course.

No additional courses are required for the Option in Agricultural Education. No classes would be deleted or changed for the Option in Agricultural Education. The proposed Option in Agricultural Communication and Leadership would require the following courses:

Table 3: Existing Courses to be included in the Option in Agricultural Communication and Leadership

Course Number	Course Title	Change	Credit Units	Prerequisites and/or Recommended Background	Course Description if New Course	Mode of Delivery
CMST 235	Intercultural Communication Theories and Practice	Required course	3			Regular
JOUR 255	Digital Media Literacy	Required course	3			Regular
JOUR 265	Survey of PR and Media Relations	Required course	3	Prerequisites: Sophomore standing; concurrent enrollment in or prior completion of JOUR 260W for Journalism majors.		Regular
JOUR 260W	Writing for Mass Media	Required course	3			Regular
JOUR 341W	Writing for PR	Required course	3	Prerequisites: Completion of GE Written Communication (A2) requirement, JOUR 260W, JOUR 265.		Regular

D. List elective courses for the program which are added, deleted, or changed. Mode of delivery is either regular, on-line, or hybrid. Please add rows as necessary with one row for each course.

Elective options for the Agricultural Education option would include upper-division courses in Agriculture (AGRI), Agricultural Business, Animal Science, and Plant Science. Elective options for the Agricultural Communication and Leadership option would include upper-division courses in Communication Studies (CMST) and Journalism and Public Relations (JOUR) courses. However, no new courses would be added, deleted or changed.

E. For new, changed, and/or deleted courses identify the primary faculty responsible for those courses and how the shift in responsibilities will be accounted for by the program.

The proposed program change does not change current courses nor will it shift responsibilities of faculty members.

F. Explanation of any special program characteristics (e.g., terminology, credit units required, types of coursework, etc.).

The Option in Agricultural Education does prepare students to enter the secondary single subject credential program. Given this program area requires two credentials (Single Subject Agriculture and Agricultural Specialist) in California, students complete the subject matter competency requirements as well as the credential prerequisites and agricultural specialists credential requirements as part of their

undergraduate degree. Thus, every course required in the Agricultural Education Option is utilized for general education, subject matter competency or credential prerequisite requirements.

Courses within the Agricultural Science major and Agricultural Education option each are required to fulfill one of the following areas:

Subject Matter Competency	Units
ABUS 101 (GE Area D1)	3
ABUS 231/261	3
AGET 150	3
AGRI 305	3
AGRI 331/PSSC 363	3
ANSC 101	3
ANSC 120/230	3
PSSC 101 (GE Area B2)	3
PSSC 250	3
2 LD Ag electives	6
2 UD Ag electives	6
3 UD Ag electives (specialization)	9
Single-Subject Credential Prerequisite	
AGED 210	2
EDTE 302	3
EDTE 451 (GE Area E)	3
EDTE 530	3
EDTE 534	2
ENGL 471 (GE UD-C)	3
Ag Specialist Credential	
AGED 201	3
AGED 321	2
AGED 420	2
AGED 421	3
General Education	
AGRI 482W (GE GW, UD-D)	3
College of Ag requirement for all majors	
AGRI 180	1
CHEM 107/111 (GE Area B1)	4
Total units	82

G. Provision for meeting accreditation requirements, where applicable, and anticipated date of accreditation request.

All components necessary for the two credentials required for teachers to be employed as agricultural educators at the secondary level remain consistent with the previous degree option.

H. Other program requirements.

1. Undergraduate programs: Catalog number and title of the current Graduation Writing Assessment (GWAR) course and replacement course, if applicable.

The current Graduation Writing Assessment course, Agricultural Issues (AGRI 482W) would remain the Graduation Writing Assessment course for the new degree proposal and can be seen in draft Major Academic Plans (MAPs) found on pages 21-22.

2. Undergraduate programs: Catalog number and title of current department-designated upper-division writing course(s) and replacement, if applicable. See [EM 17-009](#)

The Option in Agricultural Science and Education: Any upper-division Writing (W) course.

The Option in Agricultural Communication and Leadership: JOUR 341W Writing for Public Relations (W) 3.0 FS W

- I. For undergraduate programs, include a revised [Major Academic Plan](#) (MAP) with the proposal. If you have questions or need help, contact [Academic Advising Programs](#).

See pages 20-21.

- J. Complete catalog copy for the revised program, including full degree requirements, admission, and completion requirements. See the current University Catalog for correct format and follow it exactly. Before the proposal is submitted to Curriculum Services (for undergraduate programs) or to the Office of Graduate Studies (for graduate programs), it may be helpful to review catalog copy with Academic Publications.

Attach the [Undergraduate Program Signature form](#) or the [Graduate Program Signature form](#) to the front of the proposal and submit to Curriculum Services in Undergraduate Education or the Office of Graduate Studies after all department and college reviews are complete.

The Bachelor of Science in Agricultural Science

Total Course Requirements for the Bachelor's Degree: 120 units

See [Bachelor's Degree Requirements](#) in the University Catalog for complete details on general degree requirements. A minimum of 39 units, including those required for the major, must be

upper division.

A suggested Major Academic Plan (MAP) has been prepared to help students meet all graduation requirements within four years. You can view MAPs on the [Degree MAPs](#) page in the University Catalog or you can request a plan from your major advisor.

General Education Pathway Requirements: 48 units

See [General Education](#) in the University Catalog and the [Class Schedule](#) for the most current information on General Education Pathway Requirements and course offerings.

This major has approved GE modification(s). See below for information on how to apply these modification(s).

- ANSC 101 is an approved major course substitution for Life Sciences (B2)
- AGRI 482W is an approved major course substitution for upper-Division Social Sciences

These modifications apply to The Option in Agricultural Education only

- EDTE 451 is an approved major course substitution for Learning for Life (E).
- ENGL 471 is an approved major course substitution for Upper-Division Arts/Humanities.

Diversity Course Requirements: 6 units

See [Diversity Requirements](#) in the University Catalog. Most courses taken to satisfy these requirements may also apply to [General Education](#).

Upper-Division Writing Requirement:

Writing Across the Curriculum ([Executive Memorandum 17-009](#)) is a graduation requirement and may be demonstrated through satisfactory completion of four Writing (W) courses, two of which are designated by the major department. See [Mathematics/Quantitative Reasoning and](#) in the *University Catalog* for more details on the four courses. The first of the major designated Writing (W) courses is listed below.

The Option in Agricultural Science and Education

- Any upper-division Writing (W) course.

The Option in Agricultural Communication and Leadership

- JOUR 341W Writing for Public Relations (W) 3.0 FS W

The second major-designated Writing course is the Graduation Writing Assessment Requirement (GW) ([Executive Order 665](#)). Students must earn a C- or higher to receive GW credit. The GE Written Communication (A2) requirement must be completed before a student is permitted to register for a GW course.

Grading Requirement:

All courses taken to fulfill major course requirements must be taken for a letter grade except those courses specified by the department as Credit/No Credit grading only.

Course Requirements for the Major: 78-82 units

Completion of the following courses, or their approved transfer equivalents, is required of all candidates for this degree. Additional required courses, depending upon the selected option are outlined following the major core program requirements.

Major Core Program: 47 units

Lower-Division Core: 32 units

6 courses required:

ABUS 101	Intro to Agricultural Business & Economics	3.0	FS	GE D1
AGET 150	Agricultural Machine Systems	3.0	FA	
AGRI 180	The University Experience	1.0	FS	
ANSC 101	Intro to Animal Science	3.0	FS	
PSSC 101	Introduction to Plant Science	3.0	FS	GE B2
PSSC 250	Introduction to Soil Science	3.0	FS	

Prerequisites: CHEM 107 or CHEM 111

1 course selected from:

ABUS 231 Computer Applications in Agriculture 3.0 FS

ABUS 261 Farm Accounting 3.0 FS

1 course selected from:

ANSC 120 Livestock Skills 3.0 S2

ANSC 230 Animal Feeds and Nutrition 3.0 FS

1 course selected from:

CHEM 107 General Chemistry for Applied Sciences 4.0 FS GE B1

Prerequisites: Completion of ELM requirement, Intermediate Algebra.

CHEM 111 General Chemistry 4.0 FS GE B1

Prerequisites: Completion of ELM requirement; second-year high school algebra; one year high school chemistry. (One year of high school physics and one year of high school mathematics past Algebra II are recommended.)

6 units selected from:

Any combination of lower division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant Science (PSSC), and Agricultural Business (ABUS). Choose courses in consultation with your advisor.

Upper-Division Core: 15 units

2 courses required:

AGRI 305 Agricultural Genetics 3.0 FS

Prerequisites: ANSC 101 or PSSC 101; CHEM 107 or CHEM 111.

AGRI 482W Agricultural Issues 3.0 FS GW W

Prerequisites: Completion of GE Written Communication (A2) requirement, senior standing or instructor permission.

1 course selected from:

AGRI 331	Agricultural Ecology	3.0	FA
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Prerequisites: Completion of lower-division core or faculty permission.

PSSC 363	Forage Crops	3.0	FA
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6 units selected from:

Any combination of upper division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant Science (PSSC), and Agricultural Business (ABUS). Choose courses in consultation with your advisor.

Major Option Course Requirements: 31-35 Units

The following courses, or their approved transfer equivalents, are required dependent upon the option chosen. Students must select one of the following options for completion of the major course requirements. Use the links below to jump to your chosen option.

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- [The Option in Agricultural Science and Education](#)
 - [The Option in Agricultural Communication and Leadership](#)

The Option in Agricultural Science and Education: 35 units

This option prepares students for careers in the broad field of agriculture or for careers in teaching at the secondary level. The option prepares students for diverse careers in agricultural production where the integration of animal, plant, and agri-business knowledge and skills is required.

Teaching Credentials for Agriculture

There are two credentials available for students who wish to pursue a career as an agricultural education teacher in California: Single Subject Teaching Credential and Agriculture Specialist Instruction Credential. The Single Subject Teaching Credential in Agriculture authorizes the holder to teach in the classroom. Candidates who fulfill the requirements for the Agriculture Specialist Instruction Credential are prepared to teach in out-of-classroom settings such as serving as an FFA advisor and Supervised Agricultural Experience Program supervisor.

The Single Subject Teaching Credential in Agriculture includes two components; a Subject Matter Preparation program and a Professional Education program. Students can complete the Subject Matter Preparation program by completing the Option in Agricultural Science and Education. Students completing another option or major in agriculture should consult the agricultural credential advisor to identify additional course requirements. Candidates may also demonstrate subject matter competence by successfully passing the appropriate California Subject examinations for Teachers (CSET). The subject matter preparation advisor is responsible for verifying that subject matter preparation has been completed.

The Professional Preparation component of the Single Subject Teaching Credential includes professional education courses and a student teaching experience. This portion of the credential program is administered by the School of Education. For prerequisites and other admission requirements for professional education programs, see the "Education" chapter of this catalog and the Focus on Teaching.

All credential candidates recommended by CSU, Chico are authorized to teach all students, including English language learners, in the regular classroom. You may also want to qualify for the Bilingual Authorization emphasis if you meet the pre-requisites in Spanish, Hmong or Punjabi.

The requirements for the Agriculture Specialist Instruction Credential include a series of agricultural education courses (listed below), occupational experience, and a student teaching experience. Student teaching is combined with the student teaching experience required for the Single Subject Teaching Credential in Agriculture.

If you are interested in obtaining your credentials, confer with the appropriate credential advisor(s) early in your university career. Credential advisors can assist you in planning an educational program that will prepare you for both the BS in Agricultural Science and the teaching credential requirements. Students pursuing this career objective should also complete

the single subject program pre-requisite courses and pass the California Basic Education Skills Test (CBEST).

Course Requirements

10 courses required

35 units required:

AGED 201 Introduction to Agricultural Education	3.0	FA
AGED 210 Directed Field Experience Agricultural Education	2.0	FA
AGED 321 Program Development in Agriculture Education	2.0	SP
AGED 420 Techniques in Vocational Agricultural Instruction	2.0	SP

Prerequisites: AGED 201 or faculty permission.

AGED 421 Curriculum and Methods in Teaching Agricultural Mechanics	3.0	FA
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Prerequisites: AGET 120, AGET 150 or equivalent

EDTE 302 Access and Equity in Education	3.0	FA
EDTE 451 Health Education for Secondary School Teachers	3.0	FS
EDTE 530 Fundamentals of Teaching Practice for Secondary Teachers	3.0	FS
EDTE 534 Teaching Special Populations	2.0	FS
ENGL 471 Intensive Theory and Practice of Second Language Acquisition	3.0	FS

9 units selected from: Any combination of upper division courses in PSSC, ANSC, ABUS, AGET, or AGRI courses. Choose courses in consultation with your advisor to meet the subject matter competency requirements.

Students are strongly encouraged to gain practical skills and knowledge through an approved internship or directed work experience in areas where additional experience is needed to become a successful agricultural teacher. With the approval of your advisor, single subject credential program pre-requisite courses may be used as electives in this option. Students pursuing this career objective should also see the School of Education Credential Advisor to learn about additional credential program prerequisite requirements.

The Option in Agricultural Communication & Leadership: 31 units

8 courses required:

AGRI 380A	Agricultural Leadership	3.0	F
AGRI 380B	Leadership in the Workplace	3.0	S
CMST 133	Speech and Debate Practicum	1.0	FS
CMST 235	Intercultural Communication Theories and Practice	3.0	FS GE E, USD
JOUR 255	Digital Media Literacy and Civic Engagement (W)	3.0	FS GE E
JOUR 260W	Writing for Mass Media	3.0	FS

Prerequisites: ENGL 130W or JOUR 130W.

JOUR 265	Survey of PR & Media Relations	3.0	FS
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Prerequisites: Sophomore standing; concurrent enrollment in or prior completion of JOUR 260.

JOUR 341W	Writing For Public Relations	3.0	FS GW W
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Prerequisites: Completion of GE Written Communication (A2) requirement, JOUR 260W, JOUR 265.

9 units selected from: Any combination of upper division courses in CMST or JOUR.
Choose courses in consultation with your advisor.

Advising Requirement:

Advising is mandatory for all majors in this degree program. Consult your undergraduate advisor for specific information.

Honors in the Major:

Honors in the Major is a program of independent work in your major. It requires 6 units of honors course work completed over two semesters.

The Honors in the Major program allows you to work closely with a faculty mentor in your area of interest on an original performance or research project. This year-long collaboration allows you to work in your field at a professional level and culminates in a public presentation of your work. Students sometimes take their projects beyond the University for submission in professional journals, presentation at conferences, or academic competition. Such experience is valuable for graduate school and professional life. Your honors work will be recognized at your graduation, on your permanent transcripts, and on your diploma. It is often accompanied by letters of commendation from your mentor in the department or the department chair.

Some common features of Honors in the Major program are:

- You must take 6 units of Honors in the Major course work. All 6 units are honors classes (marked by a suffix of H), and at least 3 of these units are independent study (399H, 499H, 599H) as specified by your department. You must complete each class with a minimum grade of B.
- You must have completed 9 units of upper-division course work or 21 overall units in your major before you can be admitted to Honors in the Major. Check the requirements for your major carefully, as there may be specific courses that must be included in these units.
- Your *cumulative* GPA should be at least 3.5 or within the top 5% of majors in your department.
- Your GPA *in your major* should be at least 3.5 or within the top 5% of majors in your department.
- Most students apply for or are invited to participate in Honors in the Major during the second semester of their junior year. Then they complete the 6 units of course work over the two semesters of their senior year.
- Your honors work culminates with a public presentation of your honors project.

While Honors in the Major is part of the Honors Program, each department administers its own program. Please contact your major department or major advisor to apply.

Letter of Support from Library Dean

Meriam Library
California State University, Chico

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MEMORANDUM

To: Dr. Mollie Aschenbrener

From: Marc Langston

Date: June 11, 2018

Subject: Library materials support for Agriculture program changes, specifically the new Agricultural Science and Communication option

The proposed option in Agricultural Science and Communication uses only existing courses in Agriculture and Journalism. The Meriam Library currently supports these two departments with the following holdings:

Agriculture

Print Books: 10,183 titles

Print Journals: 747 titles

E-books: 1,449 titles

E-journals: 1,140 titles

Databases: Agricola, CAB Abstracts, Academic Search, American Chemical Society, Science Direct

Journalism

Print Books: 2,072

Print Journals: 56

E-books: 482

E-journals: 79

Databases: Academic Search, Communication & Mass Media Complete, America's News, ProQuest Newsstand, JSTOR

In addition to resources currently held in the Library, Agriculture and Journalism are allotted an annual book budget to purchase new library materials. The Library's Agriculture and Journalism librarians, who also make available information literacy instruction to students, oversee selection of these new materials.

The Meriam Library currently provides adequate access to both electronic and physical library and learning resources that would support the new Agricultural Science and Communication option.

Letter of Support: Dean John Unruh, College of Agriculture

MEMORANDUM

Date: November 4, 2020

To: EPPC Academic Senate

Chancellor's Office

From: John Unruh, Dean College of Agriculture 

Subject: Name change, curricular redesign, and addition of an option to: BS in Agricultural Science

Option in Agricultural Science and Education Option in Agricultural Communications and Leadership

The College of Agriculture supports the name change and curricular redesign of the BS in Agriculture with an option on Agricultural Education to an BS in Agricultural Science with an option in Agricultural Science and Education and an additional new option in Agricultural Communication and Leadership. These changes align with similar degrees in other Colleges of Agriculture in the California State University System. As stated in the proposal, no additional resources or program support is needed at this time. Additional resources and program support may need to be considered if there is significant growth in the program in the future.

The Agricultural Education program is committed to the university's mission and goals with graduates in high demand in Education and the Agriculture Industry. The College of Agriculture has and will continue to provide support for this program through this change and into the future.

Letter of support: Associate Dean Deborah Summers, College of Communication & Education



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TO: EPPC
Academic Senate
Chancellor's Office

From: Angela Trethewey, Dean
Deborah Summers, Associate Dean and
Educational Preparation Providers Unit (EPP Unit) head

Date: November 3, 2020

The College of Communication and Education (CME) and the All University Responsibility for Teacher Education Committee (AURTEC) support the elevation of the Agriscience and Education option in the BS in Agriculture to a stand-alone BS degree in Agricultural Science with options in agricultural education and communication.

In particular, the option in agricultural education will allow students to obtain the subject matter competency needed to apply for admission to a teacher credential program and allow students to complete prerequisite credential coursework while obtaining their undergraduate degree. AURTEC was consulted about this plan and previous versions. The option in agriculture education provides future teachers with a clear path forward and helps to address the growing demand for secondary teachers in Agriculture.

CME has also been a tremendous supporter of the option in agricultural communication and leadership. This is a career path of growing interest across the state. The focus on communication and leadership is an interdisciplinary effort that should grow enrollment and provide students with relevant and marketable skills.

Sincerely,

Deborah Summers, Associate Dean

Appendix C: Proposed Curriculum MAPs

Draft MAP: Agricultural Science with an option in Agricultural Education

Year 1 - Fall	Units	Year 1 - Spring	Units
GE Area A2	3	<i>ANSC 101 (SMC)</i>	3
GE Area A4	3	<i>LD Ag Elective (SMC)</i>	3
POLS 155 or HIST 130	3	GE Area A1	3
AGED 201	3	GE Area A3	3
AGRI 180	1	GE Area C1	3
Total Units	13	Total Units	15
Year 2 - Fall	Units	Year 2 - Spring	Units
<i>ABUS 101 (SMC, GE Area D)</i>	3	<i>ABUS 231/261 (SMC)</i>	3
<i>AGET 150 (SMC)</i>	3	CHEM 107 (GE Area B1, 3 units)	4
<i>PSSC 101 (SMC, GE Area B2)</i>	3	POLS 155 or HIST 130	3
<i>PSSC 250 (SMC)</i>	3	AGED 210	2
GE Area C2 (W)	3	<i>LD Ag Elective (SMC)</i>	3
Total Units	15	Total Units	15
Year 3 - Fall	Units	Year 3 - Spring	Units
<i>AGRI 305 (ANSC SMC)</i>	3	AGED 321	2
<i>AGRI 331/PSSC 363 (SMC NR)</i>	3	<i>UD Ag Elective (SMC)</i>	3
<i>UD Ag Elective (SMC)</i>	3	<i>GE UD-B</i>	3
GE Area F	3	Elective	3
<i>ANSC 120/ANSC230 (SMC)</i>	3	Elective	2
		<i>UD Ag Elective (specialization)</i>	3
Total Units	15	Total Units	16
Year 4 - Fall	Units	Year 4 - Spring	Units
AGED 421	3	AGED 420	2
EDTE 530	3	EDTE 302	3
EDTE 534	2	EDTE 451 (GE Area E, Online)	3
AGRI 482W (UD-D)	3	<i>UD Ag Elective (specialization)</i>	3
Elective	3	ENGL 471 (UD GE, Area C)	3
<i>UD Ag Elective (specialization)</i>	3		
Total Units	17	Total Units	14
		BS – Total Units	120

One Global Cultures, one US Diversity, and one Writing course should be taken as part of GE in addition to ENGL/JOUR 130W, AGRI 482W, and an additional Writing course in GE or Elective.

Key:	GE	Single Subject Credential Pre-req	Ag Specialist Credential	Subject Matter Competency (SMC)
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Draft MAP: Agricultural Science with an option in Agricultural Communication & Leadership

Year 1 - Fall	Units	Year 1 - Spring	Units
PSSC 101 (GE Area B2)	3	ANSC 101	3
HIST 130 or POLS 155	3	GE Area A3	3
AGRI 180	1	POLS 155 or HIST 130	3
GE Area A1	3	GE AREA C1*	3
CMST 133	1	GE Area A2	3
GE Area A4	3	Total Units	15
Total Units	14		
Year 2 - Fall	Units	Year 2 - Spring	Units
ABUS 101 (GE Area D)	3	JOUR 255 (GE Area E)	3
AGET 150	3	ABUS 231/261	3
CHEM 107/111 (GE Area B1)	4	PSSC 250	3
GE Area C2*	3	ANSC 120/230	3
GE Area F	3	LD Ag Elective	3
Total Units	16	Total Units	15
Year 3 - Fall	Units	Year 3 - Spring	Units
CMST 235 (GE USD)	3	JOUR 341W	3
JOUR 260W	3	GE UD-C*	3
JOUR 265	3	UD Ag Elective	3
LD Ag Elective	3	AGRI 331/PSSC 363	3
AGRI 305	3	UD CMST / JOUR Elective	3
Total Units	15	Total Units	15
Year 4 - Fall	Units	Year 4 - Spring	Units
AGRI 380A	3	AGRI 380B	3
UD CMST / JOUR Elective	3	AGRI 482W (UD-D)	3
GE UD-B*	3	Elective	3
UD Ag Elective	3	UD CMST / JOUR Elective	3
Elective	3	Elective	3
Total Units	15	Total Units	15
		BS – Total Units	120

*At least one of these should fulfill the GE Global Cultures requirement.

Key:	GE only	LD Core	UD Core	Ag Com option
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Existing Catalog Copy

The Bachelor of Science in Agriculture

Total Course Requirements for the Bachelor's Degree: 120 units

See [Bachelor's Degree Requirements](#) in the *University Catalog* for complete details on general degree requirements. A minimum of 39 units, including those required for the major, must be upper division.

A suggested Major Academic Plan (MAP) has been prepared to help students meet all graduation requirements within four years. You can view MAPs on the [Major Academic Plans](#) page or you can request a plan from your major advisor.

Courses in this program may complete more than one graduation requirement.

General Education Pathway Requirements: 48 units

See [General Education](#) in the *University Catalog* and the [Class Schedule](#) for the most current information on General Education Pathway Requirements and course offerings.

This major has approved GE modification(s). See below for information on how to apply these modification(s).

- ANSC 101 is an approved major course substitution for Life Sciences (B2).
- AGRI 482W is an approved major course substitution for Upper-Division Social Sciences.

Diversity Course Requirements: 6 units

See [Diversity Requirements](#) in the *University Catalog*. Most courses taken to satisfy these requirements may also apply to [General Education](#).

Upper-Division Writing Requirement:

Writing Across the Curriculum ([Executive Memorandum 17-009](#)) is a graduation requirement and may be demonstrated through satisfactory completion of four Writing (W) courses, two of which are designated by the major department. See [Mathematics/Quantitative Reasoning and Writing Requirements](#) in the *University Catalog* for more details on the four courses. The first of the major designated Writing (W) courses is listed below.

The Option in Agricultural Science and Education

- Any upper-division Writing (W) course.

The second major-designated Writing course is the Graduation Writing Assessment Requirement (GW) ([Executive Order 665](#)). Students must earn a C- or higher to receive GW credit. The GE Written Communication (A2) requirement must be completed before a student is permitted to register for a GW course.

Grading Requirement:

All courses taken to fulfill major course requirements must be taken for a letter grade except those courses specified by the department as Credit/No Credit grading only.

Course Requirements for the Major: 78 units

Completion of the following courses, or their approved transfer equivalents, is required of all candidates for this degree. Additional required courses, depending upon the selected option are outlined following the major core program requirements.

Major Core Program: 33 units

Lower-Division Core: 24 units

4 courses required:

AGET 150	Agricultural Machine Systems	3.0	FA	
AGRI 180	The University Experience	1.0	FS	
MATH 105	Introduction to Statistics	3.0	FS	GE
Prerequisite: GE Mathematics/Quantitative Reasoning Ready.				
PSSC 101	Introduction to Plant Science	3.0	FS	GE

1 course selected from:

CHEM 107	General Chemistry for Applied Sciences	4.0	FS	GE
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Prerequisites: GE Mathematics/Quantitative Reasoning Ready, Intermediate Algebra.

CHEM 111	General Chemistry	4.0	FS	GE
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Prerequisites: GE Mathematics/Quantitative Reasoning Ready; second-year high school algebra; one year high school chemistry. (One year of high school physics and one year of high school mathematics past Algebra II are recommended.)

1 course selected from:

CHEM 108	Organic Chemistry for Applied Sciences	4.0	FS	GE
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Prerequisites: CHEM 107 or CHEM 111 or equivalent.

CHEM 112	General Chemistry	4.0	FS	
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Prerequisites: CHEM 111 with a grade of C- or better.

6 units selected from:

Any combination of lower division courses in Agriculture (AGRI), Agricultural Engineering Technology (AGET), Animal Science (ANSC), Plant Science (PSSC), and Agricultural Business (ABUS). Choose courses in consultation with your advisor.

*12 units in these areas may be transferred from a community college. Students not seeking a teaching credential are encouraged to take AGRI 490W - Agricultural Experimental Research as an elective to strengthen their analytical skills.

Teaching Credentials for Agriculture

There are two credentials available for students who wish to pursue a career as an agricultural education teacher in California: the Single Subject Teaching Credential and the Agriculture Specialist Instruction Credential. The Single Subject Teaching Credential in Agriculture authorizes the holder to teach in the classroom. Candidates who fulfill the requirements for the Agriculture Specialist Instruction Credential are prepared to teach in out-of-classroom settings such as serving as an FFA advisor and Supervised Agricultural Experience Program supervisor.

The Single Subject Teaching Credential in Agriculture includes two components; a Subject Matter Preparation program and a Professional Education program. Students can complete the Subject Matter Preparation program by completing the Option in Agricultural Science and Education. Students completing another option or major in agriculture should consult the agricultural credential advisor to identify additional course requirements. Candidates may also demonstrate subject matter competence by successfully passing the appropriate California Subject examinations for Teachers (CSET). The subject matter preparation advisor is responsible for verifying that subject matter preparation has been completed.

The Professional Preparation component of the Single Subject Teaching Credential includes professional education courses and a student teaching experience. This portion of the credential program is administered by the Department of Education within the School of Education. For prerequisites and other admission requirements for professional education programs, see the "Education" chapter of this catalog and the Focus on Teaching.

You may want to consider adding the following courses to your undergraduate program: EDTE 451, EDTE 530, and ENGL 471. All of these courses are prerequisites for the credential program.

All credential candidates recommended by CSU, Chico are authorized to teach all students, including English language learners, in the regular classroom. You may also want to qualify for the BCLAD (Bilingual, Cross-cultural, Language, and Academic Development) emphasis if you have skills in Spanish language and culture.

The requirements for the Agriculture Specialist Instruction Credential include a series of agricultural education courses (listed below), occupational experience, and a student teaching experience. Student teaching is combined with the student teaching experience required for the Single Subject Teaching Credential in Agriculture.

If you are interested in obtaining your credentials, confer with the appropriate credential advisor(s) early in your university career. Credential advisors can assist you in planning an educational program that will prepare you for both the BS in Agriculture and the teaching credential requirements. Students pursuing this career objective should also complete the single subject program pre-requisite courses and pass the California Basic Education Skills Test (CBEST).

Agricultural Education Courses

AGED 201 Introduction to Agricultural Education 3.0 FA

AGED 210 Directed Field Experience Agricultural Education 2.0 FA

AGED 321 Program Development in Agriculture Education 2.0 SP

AGED 420 Techniques in Vocational Agricultural Instruction 2.0 SP

Prerequisites: AGED 201 or faculty permission.

AGED 421 Curriculum and Methods in Teaching Agricultural Mechanics 3.0 FA

Prerequisites: AGED 120, AGED 150 or equivalent.

45 units of required subject matter competency may be obtained by completing courses in the areas of:

- Agricultural Business: 9 units. Recommended: ABUS 101*, ABUS 261, ABUS 321
- Agricultural Mechanics: 8 units. Recommended: AGED 120, AGED 150*
- Animal Science: 8 units. Recommended: ANSC 101*, ANSC 230
- Plant Science: 8 units. Recommended: PSSC 101*, PSSC 250
- Natural Resources: 3 units. Recommended: AGRI 331*

*Required in either the core or in the option.

Plus 9 units of additional courses in one of the above areas (a specialization). This credential requirement may be met using coursework in the major and in the option.

Students are strongly encouraged to gain practical skills and knowledge through an approved internship or directed work experience in areas where additional experience is needed to become a successful agricultural teacher. With the approval of your advisor, single subject credential program pre-requisite courses may be used as electives in this option.

Agricultural Communications

Students wishing to pursue a career in agricultural communications are encouraged to take the following courses as part of their option electives. Agricultural communications prepares students to enter the field by blending agriculture, journalism, and communication studies.

CMST 131 Speech Communication Fundamentals 3.0 FS GE

CMST 330 Introduction to Communication Studies 3.0 FS

JOUR 255W Digital Media Literacy and Civic Engagement (W) 3.0 FS GE W

JOUR 260W Writing for Mass Media (W) 3.0 FS W

Prerequisite: ENGL 130W or JOUR 130W.

JOUR 265 Survey of PR and Media Relations 3.0 FS

Prerequisites: Sophomore standing; JOUR 260W (may be taken concurrently) for Journalism majors.

JOUR 341W Writing for Public Relations (W) 3.0 FS GW W

Prerequisites: Completion of GE Written Communication (A2) requirement, JOUR 260W, JOUR 265 .

Advising Requirement:

Advising is mandatory for all majors in this degree program. Consult your undergraduate advisor for specific information.

Honors in the Major:

Honors in the Major is a program of independent work in your major. It requires 6 units of honors course work completed over two semesters.

The Honors in the Major program allows you to work closely with a faculty mentor in your area of interest on an original performance or research project. This year-long collaboration allows you to work in your field at a professional level and culminates in a public presentation of your work. Students sometimes take their projects beyond the University for submission in professional journals, presentation at conferences, or academic competition. Such experience is valuable for graduate school and professional life. Your honors work will be recognized at your graduation, on your permanent transcripts, and on your diploma. It is often accompanied by letters of commendation from your mentor in the department or the department chair.

Some common features of Honors in the Major program are:

- You must take 6 units of Honors in the Major course work. All 6 units are honors classes (marked by a suffix of H), and at least 3 of these units are independent study (399H, 499H, 599H) as specified by your department. You must complete each class with a minimum grade of B.
- You must have completed 9 units of upper-division course work or 21 overall units in your major before you can be admitted to Honors in the Major. Check the requirements for your major carefully, as there may be specific courses that must be included in these units.
- Your *cumulative* GPA should be at least 3.5 or within the top 5% of majors in your department.
- Your GPA *in your major* should be at least 3.5 or within the top 5% of majors in your department.
- Most students apply for or are invited to participate in Honors in the Major during the second semester of their junior year. Then they complete the 6 units of course work over the two semesters of their senior year.
- Your honors work culminates with a public presentation of your honors project.

While Honors in the Major is part of the Honors Program, each department administers its own program. Please contact your major department or major advisor to apply.

References:

Foster, D. D., Lawver, R. G., & Smith, A. R., (2020). National Agricultural Education Supply and Demand Study, 2019 Executive Summary. Retrieved from:
<http://aaaeonline.org/Resources/Documents/NS D2019Summary.pdf>