RESOLVED: that the Academic Senate recommend that the President approve the BS in Agricultural Business pilot degree program.

RATIONALE: Both the Academic Affairs and the Budget and Planning Committees have reviewed the proposal and find it to be both academically and fiscally sound.

Distribution List: President, Provost, AVP Academic Programs, BPA Dean, Economics Chair

Approved by the Senate on May 8, 2014
Sent to the President on May 16, 2014
Approved by the President on June 16, 2014
Proposal for a Pilot BS degree in Agricultural Business (Referral #0018)

ERRATA and ADDENDUM

1. Page 23 of the proposal incorrectly refers to the report on Library Services available to support the program as being sufficient. Instead it should read as follows:

   Ms. Johanna Alexander, CSUB Librarian, has reviewed library resources and services for the proposed pilot BS degree in AGBS, and has concluded that additional funds will be needed. It is estimated that minimum funds of $2,000 per year will be needed for the proposed degree. See letter of support (included in the Addendum) from BPA Dean John Emery committing said funds.
April 16, 2014

Re: Library Funds for the proposed BS in Agriculture Business

Dear Committee Members,

I write this letter in support of the proposed BS degree in Agriculture Business. This degree is much needed in the university’s service region. As such, the School of BPA is willing to commit to facilitate its approval.

The librarians have assessed a need for some library funds dedicated to agriculture business. I am willing to commit at least $2,000 per year towards library funds for the agriculture business program, to facilitate acquisition of materials as needed by the library. I also appreciate Ms. Johanna Alexander and Mr. Curt Asher applying for grants to secure more funding for this initiative.

Please feel free to contact me with any questions.

Sincerely,

John Emery
Dean, BPA
DATE: March 11, 2014

TO: Jacquelyn Kegley, Chair, Academic Senate
   Horace Mitchell, President
   Carl Kemnitz, Associate Vice President, Academic Programs
   John Emery, Dean, School of Business and Public Administration
   Mark Evans, Chair, Economics Department
   BJ Moore, Chair, BPA Curriculum committee

FROM: Soraya M. Coley, Provost and Vice President for Academic Affairs

RE: Agricultural Business Pilot Degree Program Proposal

Please find attached the Agricultural Business Pilot Degree Program Proposal for review and consideration by the Academic Senate. This request has been approved by the Department Chair, the School Dean, and the School of Business and Public Administration Curriculum Committee. I also support this request and appreciate the Academic Senate’s consideration. Please feel free to contact Dr. Mark Evans or Dean John Emery for questions or clarification.
NEW DEGREE PROPOSAL

Proposals to add a new degree must receive appropriate campus and Chancellor Office approval prior to implementation. All attachments are to be added to this cover sheet and remain with the proposal through the required steps of evaluation. Please consult with the Associate Vice President of Academic Programs for questions or assistance.

This proposal is to add a new degree in [title] Agricultural Business degree code: 01121 effective (term) [term]. (degree codes may be found on the CO website www.calstate.edu/approval/forms.html.

This new degree proposal is (check one):

☐ On the Academic Master Plan  ☐ Fast track proposal  ☐ Pilot degree program

Originating Department or Individual: Economics

If a department formally approved the attached proposal, attach the appropriate memorandum and approval date.

Signature: [Signature] date: 3/13/14

Curriculum Committee(s): Interschool programs should attach comments or approval from relevant school or department curriculum committees before being submitted to the Academic Affairs Committee, acting as the University Curriculum Committee. A memorandum and approval date from the curriculum committee must be attached. If any revisions were required or agreed to, a revised copy of the proposal must be attached.

Chair Signature: [Signature] date: 9/28/2014

School Dean(s): I have reviewed this proposal and send it forward for university-wide review with my comments attached. These comments include my analysis of the resource commitments that must be made to support the program and the origin(s) of those resources.

Dean Signature: [Signature] date: 3-4-14

AVP of Academic Programs: I have reviewed this proposal and send it forward to the Provost.

AVP Signature: [Signature] date: 3/1/14

Date of Senate Approval:  Date of President Approval:

Please attach the final Academic Senate Resolution, as signed by the President and return to the Office of Academic Programs, which will notify the Chancellor’s Office and the appropriate campus departments. A copy of this form must be sent to the Director of Academic Operations and Support.
1. PROGRAM TYPE

Pilot program

2. PROGRAM IDENTIFICATION

a. Campus
   - Bakersfield

b. Full and exact degree designation and title
   - Bachelor of Science in Agricultural Business

c. Date the Board of Trustees approved adding this program projection to the campus Academic Plan.
   - Pilot Program

d. Term and academic year of intended implementation (e.g. Fall 2012).
   - Fall 2014

e. Total number of units required for graduation. This will include all requirements, not just major requirements.
   - 180 quarter (120 semester)

f. Name of the department(s), division, or other unit of the campus that would offer the proposed degree major program.
   - Department of Economics, School of Business and Public Administration

g. Name, title, and rank of the individual(s) primarily responsible for drafting the proposed degree major program.
   - S. Aaron Hegde, Associate Professor, Economics

h. Statement from the appropriate campus administrative authority that the addition of this program supports the campus mission and will not impede the successful operation and growth of existing academic programs. – Dean Emery Letter in Appendix

i. Any other campus approval documents that may apply (e.g. curriculum committee approvals). – Acting Chair BJ Moore Email in Appendix

j. Please specify whether this proposed program is subject to WASC Substantive Change review. Not subject to review

k. Proposed Classification of Instructional Programs (CIP) Code and CSU Degree Program Code – 01.0101 (CIP Code) and 01121 (CSU Program Code)
3. PROGRAM OVERVIEW AND RATIONALE

a. Program Rationale

**Furthering the mission:**
The mission of the Agribusiness program offered by the School of Business and Public Administration (BPA) in California State University, Bakersfield (CSUB) is to work with industry leaders to educate, develop, and train students to enter a dynamic agriculture industry with critical thinking and communication skills, a breadth of knowledge applicable to the timely needs of the industry, and with a level of experience and awareness of the workings of the industry. This mission aligns with CSUB’s mission of furthering the region’s overall educational level, enhance its quality of life, and support its economic development.

**Furthering human capital formation and regional economic development:**
The School of BPA and CSUB play a vital role in the human capital formation of the southern San Joaquin Valley region, among the top five agricultural regions in the US. Approximately one in four private sector jobs in Kern County is in agricultural production and food manufacturing. Knowledge and skills that have value to agricultural business (agribusiness) organizations will be developed within the program. This also enables the lifelong learning pathways of graduates from community college agribusiness programs, currently lacking articulation with a baccalaureate major in the region. A seamless linkage between associate degrees in agriculture and the baccalaureate was identified as a community need within the Bakersfield area.

**Enabling transfers to CSU from California Community Colleges:**
In accordance with California Senate Bill 1440, community colleges have developed a Transfer Model Curriculum (TMC) in Agricultural Business that facilitates completion of a baccalaureate degree from a California State University (CSU), with a program in Agricultural Business in sixty semester (ninety quarter) units. At present, the Agricultural Business concentration within the BS in Business Administration, administered by the School of BPA, requires a transfer student in Agricultural Business to take additional lower and upper division business foundation courses that make it impossible to complete the baccalaureate within ninety-quarter units. These requirements essentially add over 45 additional quarter units. The proposed BS in Agricultural Business would ensure the completion of a baccalaureate within ninety-quarter units of the completion of an Associate’s degree in Agricultural Business from a community college TMC in the same (see Appendix for a copy of the TMC). The seamless transition from a community college to a baccalaureate has been something long desired by area community colleges (see letter of support for this proposal from Bakersfield College in the Appendix).

At present, through the AGBS concentration, CSUB provides upper division agricultural skills and knowledge to business students; while this 2+2 degree proposal would provide agriculture students with business skills and knowledge. This proposal builds on the basic agricultural science and business skills, and
knowledge acquired at a community college. The upper division skills and knowledge gained through CSUB completes this applied degree, making the graduates very competitive in the market for entry-level agribusiness managers. Additionally, academically qualified agribusiness professional adjunct instructors, who also assist with graduate and intern placement of agribusiness students, teach many of the AGBS courses (see Appendix for qualifications of adjunct faculty).

**b. Proposed Catalog Description, program description, degree requirements, and admission requirements**

**Catalog description and program description:**
Agricultural business includes the range of activities, from farming to retail sales of food (also known as ‘farm to fork’), that is integral to modern food production. The Bachelor of Science in Agricultural Business prepares students for entry-level employment in the business management of the food and fiber sectors.

The Bachelor of Science in Agricultural Business is a ‘2+2’ program that combines core upper division undergraduate courses in agricultural business at CSUB, with lower division agricultural science and agricultural business foundation courses completed at a community college. This degree enables students to enhance their foundation agricultural courses, completed at a community college, with upper division knowledge and skills so as to better prepare them for entry-level management positions in the agriculture and food sector. The upper division requirements provide knowledge and skills valued in all agricultural business (agribusiness) organizations, such as (1) communications skills, (2) quantitative and evaluative skills, (3) subject matter knowledge of agriculture and food sector, and (4) integrative problem solving and decision-making. The culminating experience for the major requires candidates to propose and carry out a project that applies competencies developed within the major.

**Degree and program requirements:**
Admission to the BS Agricultural Business (BS AGBS) program requires the completion of one of the following: (1) a TMC in Agriculture Business from a California Community College; or (2) at minimum, the foundational agricultural science and agricultural business courses identified below.

**Transfer Model Curriculum:**
The following foundational agricultural science and agricultural business courses (along with their C-ID Designation) have been identified as required within the TMC:

1. Four courses [12 – 14 (semester) units] from:
   - Introduction to Soil Science (AG-PS 128L – 3 units) **OR** General Chemistry for Science Majors I, with Lab (CHEM 110 – 5 units);
   - Ag Economics (AG-AB 124 – 3 units);
   - Introduction to Statistics (Math 110 – 3 units);
   - Principles of Macroeconomics (Econ 202 – 3 units)
(2) Three courses [9 – 12 (semester) units] from the following:
- Introduction to Agriculture Business (AG-AB 104 – 3 units);
- Agricultural Computer Applications (AG-AB 108L – 3 units);
- Introduction to Animal Science (AG-AS 104 – 3 units) OR Introduction to Plant Science (AG-PS 104 – 3 units) OR Introduction to Plant Science, with Lab (AG-PS 106L – 4 units)
- Agricultural Accounting (AG-AB 128L – 3 units);
- Agricultural Sales and Service (AG-AB 112L – 3 units);
(3) Two of the following courses:
- Financial Accounting (ACCT 110 – 3 units)
- Managerial Accounting (ACCT 120 – 3 units)

---

**Major Requirements for the Bachelor of Science in Agricultural Business (Quarters System)**

<table>
<thead>
<tr>
<th>Minimum Units Required for Graduation</th>
<th>180 quarter units</th>
</tr>
</thead>
</table>

**Major Requirements**

107.5 - 112

**Foundational Agricultural Science courses (9 – 13.5 units)**

1. AG-PS 128L Introduction to Soil Science OR
   CHEM 110 General Chemistry for Science Majors I, with Lab (GE Area B1, B3)
2. AG-AS 104 Introduction to Animal Science OR
   AG-PS 104 Introduction to Plant Science OR
   AG-PS 106L Introduction to Plant Science, with Lab (GE Area B2, B3)

**Foundational Agricultural Business courses (31.5 units)**

1. AG-AB 128L Agricultural Accounting OR
   AG-AB 104 Introduction to Agriculture Business
2. AG-AB 124 Agriculture Economics
3. AG-AB 112L Agricultural Sales and Service OR
   AG-AB 108L Agricultural Computer Applications
4. MATH 110 Introduction to Statistics (GE Area B4)
5. ECON 202 Principles of Macroeconomics (GE Area D2)
6. ACCT 110 Financial Accounting
7. ACCT 120 Managerial Accounting

**Core Agricultural Business courses (67 units)**

1. AGBS 271 Principles of Agricultural Law
2. AGBS 350 Agricultural Management
3. AGBS 351 Agricultural Marketing
4. AGBS 370 Agribusiness Accounting
5. AGBS 371 Economics of Agriculture and Natural Resources
6. AGBS 372 Agricultural Trade Policy
7. AGBS 373 Agricultural Finance
8. AGBS 496 Internship in Agribusiness
9. ECON 210 Analyzing Economic Data (2 units)
10. ECON 370 Environmental Economics *(GE Theme 3)*
11. ECON 490 Senior Seminar (4 units) *(Senior Capstone Course)*
12. ERM 411 Environmental Law I (4 units)
13. INST 420 Legal Research Methods (2 units)
14. PLSI 349 Food Politics and Policy
15. SCI 352B Water and the West *(GE Theme 1)*

**Other University Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSUB 101/301</td>
<td>American Institutions (History &amp; Govt.)</td>
<td>2</td>
</tr>
<tr>
<td>Area A</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Area B</td>
<td>0*</td>
<td></td>
</tr>
<tr>
<td>Area C</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Area D</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Theme 1</td>
<td>0*</td>
<td></td>
</tr>
<tr>
<td>Theme 2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Theme 3</td>
<td>0*</td>
<td></td>
</tr>
<tr>
<td>GWAR</td>
<td>0**</td>
<td></td>
</tr>
<tr>
<td>GRE</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Foreign Language</td>
<td>0**</td>
<td></td>
</tr>
</tbody>
</table>

**Additional Units**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 – 15.5</td>
</tr>
</tbody>
</table>

* Area B and D2, Theme 1, and Theme 3 are satisfied within the major.
** GWAR and Foreign Language requirements can be met without course units.

**Major Requirements for the Bachelor of Science in Agricultural Business***

(Semesters System)

**Minimum Units Required for Graduation**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>120</td>
</tr>
</tbody>
</table>

**Major Requirements**

*(Foundational Agricultural Science courses (6 – 9 units))*

1. AG-PS 128L Introduction to Soil Science **OR**
   CHEM 110 General Chemistry for Science Majors I, with Lab *(GE Area B1, B3)*
2. AG-AS 104 Introduction to Animal Science **OR**
   AG-PS 104 Introduction to Plant Science **OR**
   AG-PS 106L Introduction to Plant Science, with Lab *(GE Area B2, B3)*

*(Foundational Agricultural Business courses (21 units))*

1. AG-AB 128L Agricultural Accounting **OR**
   AG-AB 104 Introduction to Agriculture Business
2. AG-AB 124 Agriculture Economics
3. AG-AB 112L Agricultural Sales and Service OR
   AG-AB 108L Agricultural Computer Applications
4. MATH 110 Introduction to Statistics (GE Area B4)
5. ECON 202 Principles of Macroeconomics (GE Area D2)
6. ACCT 110 Financial Accounting
7. ACCT 120 Managerial Accounting

Upper Division Agricultural Business courses (42 units)
1. AGBS 271 Principles of Agricultural Law
2. AGBS 350 Agricultural Management
3. AGBS 351 Agricultural Marketing
4. AGBS 370 Agribusiness Accounting
5. AGBS 371 Economics of Agriculture and Natural Resources
6. AGBS 372 Agricultural Trade Policy
7. AGBS 373 Agricultural Finance
8. AGBS 496 Internship in Agribusiness
9. ECON 210 Analyzing Economic Data (2 units)
10. ECON 370 Environmental Economics (GE Theme 3)
11. ECON 490 Senior Seminar (Senior Capstone Course)
12. ERM 411 Environmental Law I
13. INST 420 Legal Research Methods (1 unit)
14. PLSI 349 Food Politics and Policy\(^1\)
15. SCI 352B Water and the West\(^2\) (GE Theme 1)

Other University Requirements\(^3\) 32 Units

<table>
<thead>
<tr>
<th>Class</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSUB 101/301</td>
<td>2</td>
</tr>
<tr>
<td>American Institutions</td>
<td>6</td>
</tr>
<tr>
<td>(History &amp; Govt.)</td>
<td></td>
</tr>
<tr>
<td>Area A</td>
<td>9</td>
</tr>
<tr>
<td>Area B</td>
<td>0*</td>
</tr>
<tr>
<td>Area C</td>
<td>6</td>
</tr>
<tr>
<td>Area D</td>
<td>3**</td>
</tr>
<tr>
<td>JYDR</td>
<td>3</td>
</tr>
<tr>
<td>Thematic Area Courses</td>
<td>3***</td>
</tr>
<tr>
<td>GWAR</td>
<td>0****</td>
</tr>
<tr>
<td>GRE</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>0****</td>
</tr>
</tbody>
</table>

Additional Units 16 - 19 Units

* Area B and D2, Theme 1, and Theme 3 are satisfied within the major.

\(^1\) Email from department chair acknowledging inclusion of course in the curriculum in appendix.

\(^2\) ibid

\(^3\) Note: The above semester requirements assumes current GE structure. As the CSUB GE structure is approved and formalized, upon completion of current campus-wide discussions, the above will be changed accordingly.
**Depending on GE-suitability for Area D courses required in the major.
***Depending on suitability of Water and the West for UD-B Thematic requirement.
****GWAR and Foreign Language requirements can be met without course units.
4. CURRICULUM

a. Program Goals and Student Learning Outcomes

1. Overall Program Goal
To work in collaboration with industry partners and other affiliates to increase the number of well-educated individuals who have the knowledge and skills necessary to contribute to the continued vitality and growth of the agriculture industry in the region.

2. Specific Program Goals and Student Learning Outcomes
   • Goal 1 - Communication Skills
     o Objective 1.a - Oral Communication: Students have the ability to present ideas, theories and other research orally.
     o Objective 1.b - Written Communication: Students can produce focused, coherent, and grammatically correct written communications, as well as electronic display, to agribusiness managers.
   • Goal 2 - Critical Thinking Skills
     o Objective 2.a - Quantitative Skills: Students can design a quantitative approach to solving an agriculture industry problem.
     o Objective 2.b - Analytical Skills: Students have the ability to analyze agribusiness data and evaluate results.
     o Objective 2.c - Ethical Reasoning: Students will be able to apply a range of ethical perspectives to dilemmas in the agriculture and food industries.
   • Goal 3 - Knowledge of regional agriculture and food industry
     o Objective 3.a - Regional and Global Agriculture: Students demonstrate a practical understanding of regional and global production and business operations in agribusiness using basic economic principles.
     o Objective 3.b - Experiential Learning: Students complete an experiential learning internship within an agribusiness organization, to apply theory to practice.
     o Objective 3.c - Careers: Students identify career paths available in the agriculture and food industries.
   • Goal 4 - Application Skills
     o Objective 4.a - Decision Making: Students apply economic concepts and theory to decision making in agribusiness.
     o Objective 4.b - Industry: Students are able to critically assess contemporary agricultural issues and trends.

b. Assessment Plan
The assessment plan builds on the facts that: (1) program learning objectives are nearly identical to those for business administration and economics and (2) courses required for the Agriculture Business major overwhelmingly are offered within these other BPA programs, hence program and course learning objectives already are aligned.
• Matrices already have been developed that map the relationship between course requirements and program learning objectives.
• Program and course learning objectives already have been aligned and integrated with university-wide learning objectives and objectives for the general education content areas.
• Calendars already are in use to schedule course-embedded assessments of program learning outcomes.
• Semi-annual retreats (each fall and spring) already are held in the School of Business and Public Administration with the primary focus of the assessment part of each agenda being to ensure data reporting extends to closing the loop for continuous improvement.
• The learning outcomes assessment plan for Agriculture Business will bootstrap on and be coordinated with these ongoing assessment activities.

c. Units required for graduation

The major requires a minimum of 107.5 quarter units and a maximum of 112 quarter units. Other university-wide requirements are completed with 87 quarter units of CSUB coursework. There is an overlap of 30 quarter units between major and university-wide requirements (upper division Themes 1 and 3, general education areas B and D2). Hence, all requirements can be completed in a minimum of 164.5 quarter units (107.5 + 87 – 30) and a maximum of 169 (112 + 87 – 30) units, leaving a minimum of 11 and a maximum of 15.5 quarter units for free electives or previously completed coursework.

d. Justification for exceeding 180 quarter units – Not applicable

e. Formal options, minors, concentrations, emphases - Not applicable

f. Required Major courses

Table 4f: Required Major courses and Prerequisites

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Prerequisite*</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Foundational Ag Business and Ag Science courses</strong></td>
<td></td>
</tr>
<tr>
<td>AG-PS 128L <strong>OR</strong> CHEM 110</td>
<td>AG-PS 128L: Elementary Algebra; CHEM 110: Intermediate Algebra</td>
</tr>
<tr>
<td>AG-AS 104 <strong>OR</strong> AG-PS 104 <strong>OR</strong> AG-PS 106L</td>
<td>Reading Level 5 or 6</td>
</tr>
<tr>
<td>AG-AB 128L <strong>OR</strong> AG-AB 104</td>
<td>Reading Level 5 or 6</td>
</tr>
<tr>
<td>AG-AB 124</td>
<td>Elementary Algebra</td>
</tr>
<tr>
<td>AG-AB 112L <strong>OR</strong> AG-AB 108L</td>
<td>Reading Level 5 or 6</td>
</tr>
<tr>
<td>MATH 110</td>
<td>Intermediate Algebra</td>
</tr>
<tr>
<td>ECON 202</td>
<td>Reading Level 5 or 6, Elementary Algebra</td>
</tr>
<tr>
<td>ACCT 110</td>
<td>Intermediate Algebra, Reading Level 5 or 6</td>
</tr>
<tr>
<td>ACCT 120</td>
<td>ACCT 110</td>
</tr>
</tbody>
</table>
Upper Division AGBS courses

<table>
<thead>
<tr>
<th>Requirement (Cross list)</th>
<th>Instructor</th>
<th>Quarter Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS 271 (BA 270)</td>
<td>Green (adjunct)</td>
<td>Varies; One section per year</td>
</tr>
<tr>
<td>AGBS 350 (MGMT 350)</td>
<td>Padilla (adjunct)</td>
<td>Fall, every other year</td>
</tr>
<tr>
<td>AGBS 351 (MKTG 351)</td>
<td>Hayslett (adjunct)</td>
<td>Winter, every other year</td>
</tr>
<tr>
<td>AGBS 370 (ACCT 370)</td>
<td>McCown, ajuncts</td>
<td>Spring, every other year</td>
</tr>
<tr>
<td>AGBS 371 (Econ 371)</td>
<td>Hegde</td>
<td>Fall, every other year</td>
</tr>
</tbody>
</table>

* Prerequisite for courses without a C-ID are based on the minimum requirement for equivalent courses at regional community colleges. Courses with C-ID use listed prerequisites.

**g. Elective Major courses** - None

**h. Needed new courses** – None

Existing course Econ 490 needs to be updated to include the following description under “prerequisites” – Econ 301, 302, 420 and senior standing in Economics or senior standing in the AGBS program and completion of upper division AGBS courses

**i. Course offering plan**

The AGBS courses are presently offered as part of the AGBS concentration within the BS in Business Administration. These course offerings are on a two-year rotation. With the exception of Dr. Aaron Hegde, an agricultural economist, all other AGBS courses are taught by adjuncts (see Appendix for more information about adjunct faculty qualifications). These courses are also cross-listed with various other departments within BPA (listed within the table below). However, the responsibility for staffing these AGBS courses has been delegated to the department of Economics.

Table 4i: Major Course Offerings
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Instructor</th>
<th>Offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS 372 (Econ 372)</td>
<td>Hegde</td>
<td>Winter, every other year</td>
</tr>
<tr>
<td>AGBS 373 (Econ 373)</td>
<td>Hegde</td>
<td>Spring, every other year</td>
</tr>
<tr>
<td>AGBS 496</td>
<td>Economics faculty</td>
<td>As needed, independent study</td>
</tr>
<tr>
<td>ECON 210</td>
<td>Adjuncts</td>
<td>Every quarter</td>
</tr>
<tr>
<td>ECON 370</td>
<td>Economics faculty</td>
<td>Fall, every year</td>
</tr>
<tr>
<td>ECON 490</td>
<td>Economics faculty</td>
<td>Spring, every year</td>
</tr>
<tr>
<td>ERM 411</td>
<td>Poole (adjunct)</td>
<td>Fall, every year</td>
</tr>
<tr>
<td>INST 420</td>
<td>Hutcherson</td>
<td>Fall, every year</td>
</tr>
<tr>
<td>PLSI 349</td>
<td>Clark, Commuri</td>
<td>Varying quarters, every year</td>
</tr>
<tr>
<td>SCI 352B</td>
<td>Geology faculty</td>
<td>Varying quarters, once or twice every year</td>
</tr>
</tbody>
</table>

**j. Masters culminating activity** – Not applicable

**k. Masters accreditation** – Not applicable

**l. Admission criteria**
The program admission criteria are admission to the university and declaration of the AGBS major. While the program does not have additional requirements per se, however, individual AGBS designated courses within the program have prerequisites as listed above in Table 4f.

**m. Student continuation criteria**
Criteria for continuing in the program are identical to criteria for continuing at the university.

**n. Community college articulation**
In accordance with California Senate Bill 1440, community colleges have developed a Transfer Model Curriculum (TMC) in Agriculture Business that facilitates the completion of a baccalaureate degree from a California State University (CSU) with a program in Agricultural Business in sixty semester (ninety quarter) units beyond the Associate’s degree. This TMC articulates into the AGBS program. To ease the articulation and transfer burden, a supranumbering system known as the Course Identification Numbering System (C-ID) has been developed for Agriculture Business as well. These courses have been identified in Section 3.b. on page 4 of this document.

**o. Lower Division Transfer Pattern (LDTP)**
See above

**p. Advising road maps**
*TMC Student from community college*
The typical student who enrolls in the AGBS major will be a student transferring to CSUB from a community college with a TMC. This person is also assumed to be
general education certified and as such will not need to complete any lower division
general education requirements. Table 4p lists the roadmap for such a student.

Table 4p1: BS AGBS Roadmap for Students with TMC

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Year (Year One)</td>
<td>AGBS 350</td>
<td>AGBS 351</td>
<td>AGBS 372</td>
</tr>
<tr>
<td></td>
<td>ERM 411 (4 units)</td>
<td>AGBS 271</td>
<td>SCI 352B</td>
</tr>
<tr>
<td></td>
<td>INST 420 (2 units)</td>
<td>GRE Course</td>
<td>ECON 210 (2 units)</td>
</tr>
<tr>
<td></td>
<td>Theme 2 Course</td>
<td>3 unit course</td>
<td></td>
</tr>
<tr>
<td>46 Units</td>
<td>16 Units</td>
<td>15 Units</td>
<td>15 units</td>
</tr>
<tr>
<td></td>
<td>AGBS 371</td>
<td>AGBS 370</td>
<td>AGBS 373</td>
</tr>
<tr>
<td>Senior Year (Year Two)</td>
<td>ECON 370 (T3)</td>
<td>PLSI 349</td>
<td>ECON 490 (4 units)</td>
</tr>
<tr>
<td></td>
<td>AGBS 496</td>
<td>Free course</td>
<td>Free Course</td>
</tr>
<tr>
<td>44 Units</td>
<td>15 units</td>
<td>15 units</td>
<td>14 units</td>
</tr>
</tbody>
</table>

Native CSUB students
The following roadmap assumes a student starting their post-secondary academic
education at CSUB (i.e. first-time freshman), who is interested in the AGBS major.
This student would complete their freshman year at CSUB and then enroll (dual
enrollment) at Bakersfield College for their sophomore year. Upon completion of
year 2 at BC, the student would continue the rest of their academic tenure at CSUB.
Table 4p2 displays a roadmap for such a student.

Table 4p2: BS AGBS Roadmap for native CSUB students

<table>
<thead>
<tr>
<th>Year</th>
<th>Fall</th>
<th>Winter</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Year (Year One)</td>
<td>Area A1</td>
<td>Area C</td>
<td>Area C</td>
</tr>
<tr>
<td></td>
<td>Engl 110</td>
<td>History Course</td>
<td>PLSI 101</td>
</tr>
<tr>
<td></td>
<td>Area A3</td>
<td>Area D</td>
<td>Math 140</td>
</tr>
<tr>
<td></td>
<td>CSUB 101</td>
<td>17 units</td>
<td>15 units</td>
</tr>
<tr>
<td></td>
<td>47 Units</td>
<td>17 units</td>
<td>15 units</td>
</tr>
<tr>
<td>Sophomore Year (Year Two at BC)</td>
<td>AGBS B2</td>
<td>AGBS B6</td>
<td>AGRI B49</td>
</tr>
<tr>
<td></td>
<td>ANSI B1 (Area B2)</td>
<td>CRPS B1 (Area B3)</td>
<td>CRPS B3</td>
</tr>
<tr>
<td></td>
<td>CRPS B1 (Area B3)</td>
<td>ECON B2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Soil B1 (Area B1)</td>
<td>Area C</td>
<td>AGRI B1</td>
</tr>
<tr>
<td></td>
<td>Area C</td>
<td>15 semester units</td>
<td>15 semester units</td>
</tr>
<tr>
<td></td>
<td>45 units (quarter)</td>
<td>15 semester units</td>
<td>15 semester units</td>
</tr>
<tr>
<td></td>
<td>AGBS 350</td>
<td>AGBS 351</td>
<td>AGBS 372</td>
</tr>
<tr>
<td>Junior Year (Year Three)</td>
<td>ERM 411 (4 units)</td>
<td>AGBS 271</td>
<td>SCI 352B</td>
</tr>
<tr>
<td></td>
<td>INST 420 (2 units)</td>
<td>GRE Course</td>
<td>ECON 210 (2 units)</td>
</tr>
<tr>
<td>At CSUB</td>
<td>Theme 2 Course</td>
<td>3 unit course</td>
<td></td>
</tr>
<tr>
<td>46 Units</td>
<td>16 Units</td>
<td>15 Units</td>
<td>15 units</td>
</tr>
<tr>
<td></td>
<td>AGBS 371</td>
<td>AGBS 370</td>
<td>AGBS 373</td>
</tr>
</tbody>
</table>
Year Two

Senior Year
ECON 370
PLSI 349
ECON 490 (4 units)

At CSUB
AGBS 496
Free course
3 unit free course

42 Units
15 units
15 units
12 units

Advising Roadmaps (Semesters)
Starting Fall 2016, as CSUB converts to a semester calendar from the present quarter calendar, programs have to revise their existing roadmaps. In that spirit, the following roadmaps are those listed above, but in a semester calendar. Table 4p3 is a roadmap for students transferring to CSUB with a TMC agriculture business degree from a community college.

Table 4p3: Semester Roadmap for students with TMC

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS 271</td>
<td>AGBS 351</td>
</tr>
<tr>
<td>Junior Year</td>
<td></td>
</tr>
<tr>
<td>AGBS 350</td>
<td>AGBS 372</td>
</tr>
<tr>
<td>(Year One)</td>
<td></td>
</tr>
<tr>
<td>ERM 411</td>
<td>GRE Course</td>
</tr>
<tr>
<td>Inst 420 (1 unit)</td>
<td>SCI 352B</td>
</tr>
<tr>
<td>Econ 370</td>
<td>Theme 2 course</td>
</tr>
<tr>
<td>ECON 210 (2 units)</td>
<td></td>
</tr>
<tr>
<td>30 Units</td>
<td>15 units</td>
</tr>
<tr>
<td>Senior Year</td>
<td></td>
</tr>
<tr>
<td>AGBS 496</td>
<td>AGBS 373</td>
</tr>
<tr>
<td>(Year Two)</td>
<td></td>
</tr>
<tr>
<td>PLSI 349</td>
<td>ECON 490</td>
</tr>
<tr>
<td>2 Free courses</td>
<td>2 Free courses</td>
</tr>
<tr>
<td>30 Units</td>
<td>15 units</td>
</tr>
</tbody>
</table>

Table 4p3 is a roadmap for students starting their post-secondary education at CSUB (first-time freshmen), who would then complete the foundational agriculture business and science courses at BC, before returning to CSUB to finish their degree.

Table 4p3: Semester Roadmap for native CSUB students

<table>
<thead>
<tr>
<th>Fall</th>
<th>Spring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area A1</td>
<td>Area C</td>
</tr>
<tr>
<td>Engl 110</td>
<td>PLSi 101</td>
</tr>
<tr>
<td>Freshman Year</td>
<td></td>
</tr>
<tr>
<td>Area A3</td>
<td>Math 140</td>
</tr>
<tr>
<td>(Year One)</td>
<td></td>
</tr>
<tr>
<td>History Course</td>
<td>Area C</td>
</tr>
<tr>
<td>CSUB</td>
<td>Area D</td>
</tr>
<tr>
<td>Area C</td>
<td></td>
</tr>
<tr>
<td>CSUB 101</td>
<td></td>
</tr>
<tr>
<td>31 Units</td>
<td>16 units</td>
</tr>
<tr>
<td>AGBS B2</td>
<td>AGBS B6</td>
</tr>
<tr>
<td>ANSI B1 (Area B2)</td>
<td>ECON B2</td>
</tr>
<tr>
<td>Sophomore Year</td>
<td></td>
</tr>
<tr>
<td>CRPS B1 (Area B3)</td>
<td>AGRI B49</td>
</tr>
<tr>
<td>(Year Two at BC)</td>
<td>Soil B1 (Area B1)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>Area C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>30 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year (Year One)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS 271</td>
</tr>
<tr>
<td>AGBS 350</td>
</tr>
<tr>
<td>ERM 411</td>
</tr>
<tr>
<td>Inst 420 (1 unit)</td>
</tr>
<tr>
<td>Econ 370</td>
</tr>
<tr>
<td>ECON 210 (2 units)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>30 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior Year (Year Two)</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGBS 371</td>
</tr>
<tr>
<td>AGBS 496</td>
</tr>
<tr>
<td>PLSI 349</td>
</tr>
<tr>
<td>2 Free courses</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>29 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

**q. Accreditation requirements** - None
5. NEED FOR THE PROPOSED DEGREE MAJOR PROGRAM

a. Other CSUs offering program
There are currently five other CSU campuses that offer a baccalaureate degree in agricultural business. They are as follows: CSU Chico, Cal Poly State University-SLO, Cal Poly State University-Pomona, CSU Fresno, and CSU Stanislaus.

b. Differences between proposed program and CSU programs listed above

CSU Chico
Chico's Bachelor of Science in Agricultural Business is probably the closest in design to the proposed program. The degree requires lower division courses in the following areas: Intro to Agricultural Business and Economics; Farm Accounting; Ag Accounting; General Chemistry; Principles of Macroeconomics; Intro to Animal Science, or Intro to Plant Science, or Intro to Soil Science. The proposed CSUB program requires most of the same subject areas, to be taken at a community college, prior to entering or concurrently within the program.

The upper division course requirements are in the following areas: Ag Production; Ag Marketing; Ag Management; Ag Economics; Ag Policy; Ag Finance; Ag Ecology; Legal Environment; and an internship. The proposed CSUB program is very similar in its upper division requirements, with the exception of Ag Production and Ag Ecology. The proposed program instead requires focus on Ag Trade and Ag Accounting, two areas very relevant to the agribusiness sector in the service region.

Total requirements for the major equate to 83 semester units or 124.5 quarter units. The proposed CSUB program requires 112 quarter units or less, yet covers essentially the same core competencies, thereby providing comparable skills and knowledge.

CSU Fresno
The BS in Agricultural Business at CSU Fresno has core undergraduate courses in agricultural economics with basic business management and agricultural science foundation courses. The major requires 62 semester units (93 quarter units) and 51 general education units (whereas Chico requires 38 units of general education).

The agricultural foundation degree component requires three lower division agricultural science courses from a selection of animal science, food science, plant science, soil science, or mechanized agriculture. The proposed CSUB program requires the same from a community college. CSUF requires six lower division business management courses, primarily prerequisites to the core upper division agricultural business courses, from the following areas: law, accounting, statistics, economics, information systems, etc. These areas are also covered either in the proposed CSUB major or in the prerequisites taken at a community college. The upper division core agriculture business classes at CSUF cover the following areas: agricultural management, agricultural finance, agricultural and food policy, global agribusiness management, and agricultural market analysis, and a capstone course.
The proposed CSUB major also covers the same areas, with the exception of a global agribusiness management course. Instead, the program has a general agribusiness management course, and a course in agricultural trade, as well as an additional agricultural finance course.

**CSU Stanislaus**
The agriculture degree offered by CSU Stanislaus is a multidisciplinary Bachelor of Arts in Agricultural Studies. One of the possible concentrations closely related to the program being proposed is the concentration in Agricultural Economics, which “…provides students the opportunity to combine community college coursework in Agricultural Business with upper-division core and concentration courses at CSU Stanislaus to obtain a B.A. degree.” (CSU Stan Ag Studies website). The degree requires 30 semester units of lower-division agriculture courses from: Animal Science, Plant Science, Soil Science, Ag Economics, and Ag computers. The major also requires six courses from the following areas: social context of ag; methodology/tech of ag; physical/bio aspects of ag; business/econ of ag; ag policy; and professional development. The degree offered is more broader than any other CSU campus.

**Cal Poly – Pomona**
The College of Agriculture offers a BS in Agribusiness and Food Industry Management. Requirements for the major total 105 quarter units. The following areas are included in the core courses for the major: Agricultural Accounting, Agricultural Management, Food Politics, Agricultural Finance, Data Analysis, Personnel Management and Leadership skills. Elective courses cover areas of food industry management or animal industry. Given that Cal Poly Pomona is an ‘ag school’, the broader content areas have more specific and numerous course options. They also have access to specialize equipment and laboratories for all aspects of agriculture, from food production to retail.

**Cal Poly - SLO**
Required courses for the major sum to 113 quarter units and cover the following areas: Agricultural Accounting, Marketing, Economics, Policy, Sales; Animal Science; Agronomic Science and Agribusiness electives. As with Pomona, Cal Poly San Luis Obispo is an ‘ag school’ and as such has the capacity to offer multiple electives, full-time agriculture faculty, specialized facilities, as well as specific training, something the proposed program does not intend to duplicate.

c. Closely related CSUB curricula

Through the School of Business and Public Administration, the University recently launched a concentration in Agribusiness that combines the common requirements of a degree in business with coursework that emphasizes an understanding of the unique institutional and managerial challenges facing Agribusiness firms.
The concentration curriculum is taught by industry professionals and CSUB faculty and includes the following courses:
- Agricultural Accounting
- Agricultural Economics
- Agricultural Finance
- Agricultural Law
- Agricultural Management
- Agricultural Marketing
- Agricultural Trade

While this is an excellent path for a career in the agribusiness industry, the required lower and upper division foundational business core courses add an extra year for graduation for those students wishing to continue their agricultural business associate’s degree to earn a baccalaureate degree in the same.

d. Community participation in the planning process

Community agribusiness employers and leaders have played a critical role in the planning process of both the Agriculture Business concentration and the Agriculture Business (AGBS) major. The AGBS Task Force included local Ag Business leaders, faculty from Bakersfield College and CSUB, as well as other local employers. The AGBS Task Force worked with BPA to determine the education and skills needed by regional agricultural employers. The AGBS Task Force determined that the creation of an Agricultural Business major would create further opportunities for students that would otherwise not be available, as well as address the economic agricultural needs of the rural service region. Table 5d provides Agribusiness needs as perceived by the task force and how those needs will be met with existing or proposed curricula.

<table>
<thead>
<tr>
<th>Agribusiness Needs</th>
<th>How Needs are Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Thinking, Writing and Communications Skills, Data Analysis</td>
<td>Current: Required courses within degree</td>
</tr>
<tr>
<td>Leadership potential/ vision/ entrepreneurship; motivated; Technology skills – mobile device applications</td>
<td>Not in curriculum</td>
</tr>
<tr>
<td>Understanding of agriculture markets (regional and global)</td>
<td>Required courses in concentration</td>
</tr>
<tr>
<td>Industry, Market, Policy Analysis (domestic and foreign)</td>
<td>Courses in concentration</td>
</tr>
<tr>
<td>Experiential Learning</td>
<td>Not in curriculum</td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Exposure to Ag – Tours, Case Studies, Intro to AG course</td>
<td>Not in curriculum</td>
</tr>
<tr>
<td>Courses identified: Finance, Econ, Stats, Ag Bus; Acct; Regional Geography and Crops; Supply chains, especially retail</td>
<td>Part of AGBS concentration</td>
</tr>
</tbody>
</table>

Further, a steering committee consisting of community members from various aspects of the agriculture industry has been established in order to, among other things, procure funding for the Agricultural Business program, so as to establish an endowment that would enhance program offerings.

**e. Applicable workforce demand projections**

The USDA forecasts an estimated 54,400 jobs for those with a baccalaureate or higher degrees in food, renewable energy, and environmental specialties between 2010 and 2015. Projections indicate that 47% of jobs are expected to be in management and business. The educational problem is an absence of agriculture major that trains graduates to be competitive in increasingly technology based agriculture and food sectors. Despite the significance of agriculture to the local economy, CSUB lacks a college, a department, or a major in the food and agricultural disciplines. One of the frequent concerns raised by agricultural employers from the AGBS Task Force was the lack of local graduates. Agribusiness graduates from colleges outside the region tend to have shorter tenure with the regional agribusiness employers, resulting in loss of trained human capital. While existing programs, such as the AGBS concentration in BSBA bridge some of this gap, the proposed major goes further in addressing the direct needs of local and regional agriculture employers seeking well-trained local graduates of agriculture business.

**f. Advancement of Knowledge**

Offering a sustainable Bachelor’s degree in Agribusiness within our service region, which is one of the world’s largest and most technologically advanced agricultural production areas, meets local community workforce needs. BPA is committed to offering academic programs that address the workforce needs of this industry vital to our region’s economic development. More than 40 percent of the jobs in agriculture are business-related. Given the size of our region’s food industry and the occupational composition of jobs, student and industry demand for an academic program in agribusiness is strong and sustainable.
6. STUDENT DEMAND

a. Evidence of student interest

The AGBS concentration was first offered as part of the BS BA degree in January of 2012. As of Spring 2012, there were approximately a dozen students who had declared an interest in the AGBS concentration. Over subsequent quarters, the concentration has grown to include forty-eight majors as of Fall 2013. The Spring 2013 commencement included the first two students to graduate with a BS in Business Administration with a concentration in Agriculture Business. The incredible popularity of AGBS as a concentration is evident with the approximately three hundred percent growth in majors over the last two calendar years (six quarters spanning two different academic years). It is anticipated that this pathway (the AGBS concentration) to a potential career in the agribusiness industry will continue to attract students, albeit at a slower annual growth rate, in the foreseeable future.

The Agriculture major at BC has large enrollments, many of who could transfer to CSUB for an Agriculture Business major. Anecdotally, many of these students have expressed a desire to complete a baccalaureate in agriculture without having to leave the region, as they are place bound for a host of reasons. Most of these very capable students either do not pursue further education or choose majors that may be marginally related to their interests. Providing another path to a baccalaureate in agriculture business, as this proposed degree does, would meet this student need.

b. Diversity and access considerations

Professional careers in the food and agricultural sectors of the Central Valley are primarily held by non-Hispanics, most of who get their academic training in advanced skills and knowledge from extra-regional agricultural schools such as California Polytechnic University, San Luis Obispo and Fresno State University. Many Hispanic students in the CSUB service area are unable to attend these institutions due to financial, geographic, academic and cultural barriers. There are no four-year programs within the region that prepare students for such professional careers. One of the goals of the proposed program is to offer an agricultural major to help overcome these barriers faced by Hispanic and other place-bound students in the CSUB service region.

c. Baccalaureate flow to proposed Masters program
   - Not applicable

d. Professional use of proposed degree program

The proposed program serves three professional uses:

* Residents who have college work in agriculture related field that falls short of the baccalaureate degree are able to better qualify for advancement if they
complete the baccalaureate. The proposed degree facilitates an efficient completion.

- By increasing degree completion, the proposed degree increases human capital formation in CSUB’s service region, advancing the knowledge and skills of adults who would otherwise stop at the associate degree. Graduates of this program will develop baccalaureate-level knowledge and skills relating to: (1) communicating in organizational settings, (2) conducting statistical and evaluative studies, (3) teamwork, supervision and management, and (4) problem solving and decision-making.

- The proposed degree creates economic opportunity by enabling practitioners currently lacking a baccalaureate degree to qualify for advancement in positions requiring degree completion.

### e. Expected numbers of majors and graduates (year of initiation, 3 years and 5 years thereafter)

The proposed degree offers an alternative baccalaureate degree attainment pathway to graduates with an Associate’s degree in Agriculture Business. At present, students wishing to attain a baccalaureate degree in Agriculture Business need to enroll at other CSU campuses, such as those previously identified in section 5a. Table 6a lists the number of students enrolled in and obtaining a baccalaureate degree in Agriculture Business at these CSU campuses. Of the following list, CSU Stanislaus offers a baccalaureate in Agricultural Studies, with a concentration in Agriculture Business, rather than an exclusive degree in Agriculture Business.

#### Table 6a: Enrollments and Degrees Awarded at CSU schools with Agriculture Business

<table>
<thead>
<tr>
<th>Campus</th>
<th>Average Number of Agriculture Business degrees awarded (CSU Program Code 01121)</th>
<th>Number of Majors in Agriculture Business</th>
<th>Time period (average calculation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chico</td>
<td>40</td>
<td>550*</td>
<td>2008 - 13</td>
</tr>
<tr>
<td>Fresno</td>
<td>47</td>
<td>230</td>
<td>2006 - 13</td>
</tr>
<tr>
<td>Pomona</td>
<td>18</td>
<td>103</td>
<td>2001 - 13</td>
</tr>
<tr>
<td>SLO</td>
<td>202</td>
<td>710</td>
<td>2008 - 12</td>
</tr>
<tr>
<td>Stanislaus</td>
<td>18*</td>
<td>68</td>
<td>2007 - 12</td>
</tr>
</tbody>
</table>

*Not Agribusiness.

Note: CSU Chico aggregates enrollment data by the Department of Agriculture, rather than by specific degree programs, such as Agriculture Business. CSU Stanislaus does not have an Agriculture Business degree; rather it is a BS in Agricultural Studies (a different CSU Program Code).

As previously discussed in section 6b, many students in CSUB’s service region are unable to attend the above listed CSU campuses for a host of reasons. Over the last five years, there have been an average of 575 annual transfers from BC to CSUB (about 75% of total transfers to UC and CSU). Porterville College, the other community college with an agriculture program in the service region, transfers an average of 45 students to CSUB (40% of total transfers). Currently twenty percent of
the many agriculture students at Bakersfield College declare Agriculture Business as their major. Each year, BC confers approximately twenty associate’s degrees in agriculture, 15 to 20 percent of which are in Agriculture Business. Porterville College matriculated four students in 2011 (last year for which data is available) with an Associate’s degree in agriculture. Based on informal conversations with faculty at BC, we think that many agriculture business majors transfer from BC to other CSU or UC campuses prior to receiving their degrees. Many others choose to not complete their associate’s degree, as there are limited paths to continue on to a baccalaureate degree. During recruiting trips to BC, numerous students expressed frustration with an inability to efficiently complete a baccalaureate degree due to a lack of local opportunities.

Taking into account the status of agricultural business programs in the region and beyond, we anticipate five to seven majors during the year of initiation, ten to twelve majors three years thereafter, and fifteen to twenty majors five years after initiation of the program. This is a conservative figure as there may be some students considering the AGBS concentration who might instead choose to pursue the AGBS major (referred to as native CSUB students throughout this document). Based on these enrollments, and taking into account CSUB graduation rates, it can be conservatively estimated that there will be approximately two to three graduates (annually) three years after program initiation, and approximately five to seven graduates (annually) five years after program initiation.
7. EXISTING SUPPORT RESOURCES

a. Faculty
The following is a partial list of faculty with regular teaching assignments in one or more of the major requirements or pre-approved electives. This list does not include two new faculty in economics starting Fall 2014.

Department of Accounting and Finance
    Benjamin Bae, Professor
    Mary Doucet, Professor
    Tom Doucet, Professor
    Harvey McCown, Lecturer

Department of Economics faculty and adjuncts
    Mark Evans, Professor
    Abbas Grammy, Professor
    Jeff Green, JD, Adjunct instructor (General Counsel, Grimmway)
    Jennifer Hayslett, MS (Ag Econ), Adjunct instructor (Marketing Specialist, Grimmway)
    Aaron Hegde, Associate Professor
    Margaret Malixi, Professor
    Abran Padilla, MBA, Adjunct instructor (Director of Operations, Paramount)
    Melissa Poole, JD, Adjunct instructor (Counsel, Paramount)

Department of Geological Sciences
    Dirk Baron, Professor
    Linda Davis, Lecturer
    Janice Gillespie, Professor
    Robert Negrini, Professor

Library Sciences Department
    Norm Hutcherson, Librarian

Department of Political Science
    Gitika Commuri, Associate Professor
    S. Eugene Clark, Professor

b. Space and facilities
The program would use regular classrooms for instruction and will not require use of any more specialized facilities.

c. Library resources
Ms. Johanna Alexander, CSUB Librarian, has reviewed library resources and services and concluded that the Stiern Library can support the B.S. in Agricultural Business program offering. Her report is included in the Appendix.

*d. Equipment and other specialized material currently available*

The degree program will not require use of specialized equipment or materials.
8. ADDITIONAL SUPPORT RESOURCES REQUIRED

a. Faculty and staff

It is anticipated that some release time for the program coordinator will be required. As previously mentioned, the department of economics will have two new faculty lines and should have the needed resources. Enrollment is expected to be modest. At present, BPA offers all of the required AGBS courses biennially as part of the AGBS concentration. Enrollments in those courses can be increased without impacting current or future students, and continuing as biennial offerings. Should majors increase dramatically, the increased FTES generated would fund additional section offerings, if needed.

A major strength of the degree program is its robust capacity to enable students with two-year agriculture programs to complete their degrees without requiring CSUB to invest in specialized faculty and programs

b. Facilities

The program’s projected FTES is modest and does not affect space planning. No expansion in specialized facilities is required

c. Library Resources

The B.S. in Agriculture Business bootstraps on the library collections for business administration, public administration, communications, economics, and other social sciences. Additional library resources beyond those required to support growth of the above-mentioned programs is not required.

d. Equipment and specialized materials

No equipment or specialized materials will be required to implement the program during startup or the first two years.
Appendices

1. Economics Department Approval Letter
2. Dean Emery Letter
3. BPA Curriculum Committee Approval Email (Acting Chair BJ Moore)
4. Transfer Model Curriculum for Agriculture Business
5. Letter of support from Bakersfield College
6. Program Adjunct Faculty Qualification
7. Email from Chair of Political Science regarding PLSI 349
8. Email from Chair of Geological Sciences regarding SCI 352B
9. Library Resources Analysis by Johanna Alexander, Librarian
10. Notification email to Chairs of Biology, Chemistry, and, Physics and Engineering
TO: BPA Curriculum Committee
c: Economics Department

FROM: Mark Evans, Chair

RE: Curriculum Committee Proposal for B.S. in Agricultural Business

DATE: February 10, 2014

This is to inform you that on behalf of the Economics Department, Aaron Hegde is sending you a curriculum proposal to offer the B.S. in Agricultural Business as a 2+2 program requiring that some course work be completed at Bakersfield College or another community college.

This proposal has been embraced by community stakeholders and meets an important community need.
March 3, 2014

To: Soraya Coley
Provost and Vice President for Academic Affairs

Via: Carl Kemnitz
Associate Vice Provost for Academic Programs

From: John Emery
Dean

Re: Proposal to Add a Bachelor of Science in Agricultural Business Degree

Attached are the forms and supporting materials for a proposal to add a Bachelor of Science in Agricultural Business to be offered by the School of Business and Public Administration. The degree and associated coursework have been approved at all levels in the School of Business and Public Administration.

After careful review at several levels and extensive input from external stakeholders, the School of BPA proposes a new bachelor's degree in Agricultural Business. This is an established degree on other campuses in the CSU System. Strong local and regional demand is forecast for graduates with the credentials this degree will provide.

The courses comprising the degree proposal are existing courses with learning objectives carefully designed to provide the specialized knowledge that will make our graduates highly qualified to meet the needs of the agribusiness industry. Existing faculty, with expertise in this area, teach some courses while professionals serving as adjunct faculty will teach others.

I have determined that there is adequate excess capacity in the courses specified in the degree program at this time. Consequently, there will be little or no fiscal impact from the degree as proposed, other than some release time for an academic coordinator. Also, the School of BPA will be able to make more efficient use of existing resources. As the degree grows over time, it is anticipated that any additional enrollment will pay for itself via the student fees and FTES credits earned.

Please let me know if there are additional questions.

Thank you for your consideration.
The BPA Curriculum Committee met today and acted on two proposals.

The Committee approved the AGBS Degree Proposal and the Econ requirement in the BSBA.

BJ Moore
Acting Chair
This TMC has been accepted by the faculty subgroup of the Intersegmental Curriculum Workgroup (ICW) for review and consideration, but it is not deemed final until such time as the CCCC CO template is available for degree submission. Due to the need to vet and finalize the associated descriptors, it is anticipated that the template will be made available September 1, 2014.

### Transfer Model Curriculum Worksheet

**CCC Major or Area of Emphasis:** Agriculture Business  
**CSU Major:** Agriculture Business, Agriculture Studies, AgriBusiness, Ag Business and Food Industry Management  
**Total units: 21-32 (all units are semester units)**

**Degree Type (indicate one):** AS-T X

#### Required Core Courses:

<table>
<thead>
<tr>
<th>Title (units)</th>
<th>C-ID Designation</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Soil Science (3 units) OR Introduction to Chemistry (4 units) OR General Chemistry for Science Majors I, with Lab (5 units)</td>
<td>AG-PS 128L Under review OR CHEM 101 OR CHEM 110</td>
<td>GE Requirement and Major Preparation</td>
</tr>
<tr>
<td>Agriculture Economics (3 units)</td>
<td>AG-AB 124 Under review</td>
<td>Major Preparation, GE Requirement</td>
</tr>
<tr>
<td>Introduction to Statistics (3 units)</td>
<td>MATH 110</td>
<td>Major Preparation and GE Requirement</td>
</tr>
<tr>
<td>Principles of Macroeconomics (3 units)</td>
<td>ECON 202</td>
<td>Major Preparation and GE Requirement</td>
</tr>
</tbody>
</table>

#### List A: Select 3 courses (9 units) from the following:

<table>
<thead>
<tr>
<th>Title (units)</th>
<th>C-ID Designation</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Agriculture Business (3 units)</td>
<td>AG-AB 104 Under review</td>
<td>Major Preparation</td>
</tr>
<tr>
<td>Agricultural Computer Applications (3 units)</td>
<td>AG-AB 108 Under review</td>
<td>Major Preparation</td>
</tr>
<tr>
<td>Introduction to Animal Science (3 units) OR Introduction to Plant Science (3 units) OR Introduction to Plant Science</td>
<td>AG-AS 104 Under review OR AG-PS 104 Under review OR AG-PS 108L</td>
<td>Major preparation and GE requirement</td>
</tr>
</tbody>
</table>

*Accepted by ICFW November 2013.  
Minor corrections were made on 1/8/2014*
List B: Select up to 9 additional units (0-9 units)

Any course(s) not selected above, and/or any courses that are lower division preparation for the targeted major at a university.

List A C-ID

List B C-ID (from above) or major preparation

Summary for the Agriculture Business TMC

The FDRG felt that the data provided from the vetting process suggested a well-received TMC; 100% of the respondents stated that this TMC would provide appropriate preparation for transfer for the Agricultural Business major. Given this feedback, no changes were made to the TMC that was vetted. The majority of Community Colleges and CSUs who have Agricultural Business programs responded to the survey. During the vetting process efforts were made to reach all California Community Colleges (CCC) and California State University (CSU) programs by email from the old CPAAC listserve, Curriculum Chairs of Agriculture and Natural Resources, the California Agriculture Teachers listserve and at the annual California Agriculture Teachers Conference. In addition the FDRG well represents the diversity of California Community College (CCC) programs in Agriculture and Natural Resources with faculty from both small and large programs and from several different regions within California. The group also had good representation from four of the main California State Universities (CSU) where CCC students would transfer with this major.

The positive response and comments made about this TMC emphasized the importance of having more than one TMC for the Agriculture and Natural Resources area. The TMC for Agricultural Business was developed to specifically prepare students who plan to major in Agriculture Business. The courses selected for the core are taught at most CCCs, even programs that had a limited number of course offerings in Agricultural Business. These courses were also chosen so that they would double

Accepted by ICFW November, 2013.
Minor corrections were made on 1/8/2014
count as major preparation and fulfill general education requirements. Additionally, all the courses listed in all areas of the TMC have the potential for articulation as lower division major preparation to all the CSUs offering an Agricultural Business Degree. And finally, the FDRG tried to ensure that the course choices in Area A had enough flexibility that even a small CCC program could develop an AS-T from this TMC.

In List B, the idea was to provide flexibility so that the CCC developing the AS-T for their campus could decide what would best serve their students and they could either have students take additional courses not taken from List A or pick up additional courses needed for transfer.

Accepted by ICFW November, 2013.
Minor corrections were made on 1/8/2014
To Whom It May Concern:

I am writing this letter in support of CSUB Department of Economics’ proposal for a pilot Bachelor of Science degree in Agricultural Business. This innovative 2+2 program will enhance the knowledge and skills of our graduates for professional careers in the agriculture and food sectors.

As the collaborative partner in this proposal, Bakersfield College will provide a portion of the curriculum focusing on lower division agricultural sciences and agricultural business management. The lower division courses are part of the Transfer Model Curriculum (TMC) for Ag Business approved by the State Chancellor’s Office. Upon completion of the associate's degree, students transfer to CSUB and complete their Bachelor of Science in Agricultural Business. Bakersfield College will also help with recruitment by enhancing our existing AG Ambassadors program. We will also host workshops designed to enhance knowledge and/or skills for professional careers in the agriculture and food sectors. Finally, we are in the process of developing an Memorandum of Understanding (MOU) that would allow CSUB students to jointly enroll at BC.

We look forward to our involvement in this project. Thank you for this opportunity to support the continued efforts of Bakersfield College and CSUB as we strive to meet the needs of all students.

If you have any questions, please don’t hesitate to contact me. I may be reached at 661395-4672 or on my cell: 661342-8059.

Sincerely,

Leah Carter

Leah Carter
Dean of Career and Technical Education, Bakersfield College
Program Adjunct Faculty Qualification

Mr. Abran Padilla, Director of Finance Operations, Paramount Farms.
Mr. Padilla has experience in the agriculture industry for over a decade, and teaches the Agribusiness Management (AGBS 350) course within the program. In the various professional positions he has held, he has seen the evolution of the agriculture industry from using spreadsheets and databases to multi-dimensional problem solving using GIS and other business intelligence software. As a graduate and an active alumnu of CSUB, Mr. Padilla is well acquainted with quality programs offered by CSUB. Being a Hispanic American in a professional occupation in the agriculture sector, he is also aware of the skills and knowledge needed by Hispanic and underrepresented graduates seeking employment. Additionally, Mr. Padilla has already hired four Agriculture Business students as interns to work with him at Paramount.

Mr. Jeff Green, General Counsel, Grimmway Farms
Mr. Green teaches the Agricultural Law class. He is also general counsel at Grimmway. An alumnus of CSUB, Mr. Green is an active member of the agriculture community. He is presently the Chair of a steering committee established by University Advancement for the purpose of fundraising for the Agriculture Business program.

Ms. Jennifer Hayslett, Marketing Specialist, Grimmway Farms
Ms. Hayslett teaches the Agricultural Marketing class. Her Master’s degree from California Polytechnic University, San Luis Obispo is in Agribusiness, with a specialization in marketing. Ms. Hayslett offered the Agricultural Marketing class during winter 2013 and held a very successful produce trade show as part of her final exam. Student groups had to showcase various products from local agribusinesses they were assigned. As a result of this project, two students found internships and eventually permanent placement with a regional agribusiness firm.

Ms. Melissa Poole, Regulatory Affairs Manager, Paramount Farming Company
Ms. Poole has a law degree from UCLA. As the Regulatory Affairs Manager for Paramount Farming, Ms. Poole represents Paramount’s interest in various agriculture issues, such as water rights. She brings this knowledge and experience to her Environmental Law class. Given the importance of water issues in California agriculture, students gain valuable insights from a water law expert such as Ms. Poole.
We are happy to have our Food Policy course, Political Science 349, included in the Agribusiness concentration. We will offer the course once a year if your students help us reach a minimum enrollment level. If those enrollments are below that minimum, we will offer the course every third semester. To facilitate enrollments, please consult with us about your schedule, including the best time for the Food Policy course. Thanks.

Stanley E. Clark, Chair
Department of Political Science
Shouldn't be a problem. We offer the class each winter. However, it does fill very fast as it is a Theme 1 class.

Aaron Hegde writes:

On behalf of the economics department, I wanted to alert you to a new degree proposal (Pilot) currently with the BPA curriculum committee. This is a 2+2 degree offered in collaboration with Bakersfield College. Students complete the AGBS degree from BC and transfer to CSUB to finish two years of upper division agriculture business courses (already part of a concentration in business). There is a transfer model curriculum (TMV) for AGBS that the transfers would use. As part of their coursework at BC (or another community college), they would take courses in their agricultural science. I have attached the proposal to this email. Please let me know if you have any questions or concerns.

One of the courses students would be required to take is SBS 125: Water and the West. Would you be able to send in a memo indicating that planning that course in the AGBS program would not create any issues for CSUB? The SFASD passed a bill allowing CSUB to offer Grade A classes with Valley school districts.

Dr. Jan Gillespie
Dept. of Geological Sciences
California State University Bakersfield
9001 Stockdale Highway
Bakersfield, CA 93311
jgillespie@csusb.edu
661-654-3040
Library Resources For Ag Business Courses

Submitted Feb. 12, 2014 by Johanna Alexander

The following report includes a list of databases, number of periodicals, and book counts, relevant to the agricultural business area. While some key resources are available and accessible from the CSUB Library, additional funding is needed to update and collect in needed ag business areas. Here is a summary.

1. Database coverage is probably adequate as the CSUB Library has core databases in the areas of business, agriculture, and law.
2. With many of the library’s full text databases and journal aggregators, CSUB has a fair number of agriculture economic and business periodicals, but there are likely some titles that need to be added.
3. The CSUB government documents collection will be useful in supporting this program but ag business has not been a collection focus in the past and items will need to be added.
4. The book collection is less than adequate. While some ag business titles may have been purchased in the last few years, funding is needed to methodically build this collection with updated resources.

CSUB Databases. The library currently has access to approximately sixty databases relevant to agricultural economics, ag business, and related research areas. Databases include:

- ABI/INFORM Dateline, Global, Trade & Industry (ProQuest)
- Academic Search Premier (EBSCO)
- ACM Digital Library
- Agricola
- Ambrose Video
- ASABE Technical Library (American Society of Agricultural and Biological Engineers Publications)
- Biological Abstracts
- Biodiversity Heritage Library
- Blackwell
- Business Data & Reports Search (industry and market reports)
- Business Full Text (WILSON)
- Business Monitor International (BMI) Industry Reports
- Business Source Premier
- California Data Exchange Center (Dept Water Resources)
- California Demographics
- California Statistical Abstract
Catalog of U.S. Government Publications
Census of Agriculture
Communication & Mass Media Complete (EBSCO)
CountryWatch and CountryWatch Data
CQ Researcher
CQ Weekly
Dissertations and Theses: Humanities and Social Sciences
Duke University Press Journals
EconLit
FAOSTAT
FEDSTATS
First Research Industry Profiles
FirstGov
Gale Opposing Viewpoints in Context
Gale Virtual Reference Library
General Science Full Text (WILSON)
GeoRef (EBSCO)
GPO Access
GreenFILE
JSTOR
Just-Series Market Research Reports
Labor Market Information (EDD)
LexisNexis Academic Search
Mergent Online
Military & Government Collection (EBSCO)
NationMaster.com
National Academies Press
Official California Legislative Information
OmniFile Full Text Mega (WILSON)
Oxford Journals Online
Project Muse
ProQuest Databases including ABI/Inform
ProQuest Newspapers (ProQuest)
ProQuest Selected Business and Newspaper Databases (ProQuest)
Rand California
Roper Center Public Opinion Archives
Safari Online Technical Books
Sage
Science Direct (Elsevier)
### Periodicals in Business & Economics

- **Agricultural Economics (210)**
- **Business Education (25)**
- **Commerce**
  - Accounting (196)
  - Advertising (79)
  - Business Communication (34)
  - Commerce - General (164)
  - International Commerce (150)
  - Local Commerce (198)
  - Marketing & Sales (508)
- **Demography (92)**
- **Economic History (1747)**
- **Economic Theory (569)**
- **Finance**
  - Banking (369)
  - Credit, Debt & Loans (17)
  - Finance - General (120)
  - Financial Management & Planning (168)
  - Insurance (110)
  - International Finance (44)
  - Investment & Speculation (216)
  - Money (13)
- **Industries (1261)**
- **Labor & Workers' Economics (356)**
- **Management**
  - Industrial Management (149)
  - Management Styles & Communication (218)
  - Management Theory (413)
  - Office & Personnel Management (313)
- **Real Estate, Housing & Land Use (153)**
- **Transportation Economics (305)**
Periodicals Relevant to Environmental and Natural Resources

- Agriculture
  - Agriculture - General (430)
  - Animal Sciences (248)
  - Plant Sciences (220)
- Ecology (281)
- Environmental Sciences (314)
- Forestry (144)

Periodicals Relevant to Areas of Law, Politics & Government

- Government - General
  - Government Documents & Papers (38)
  - Political Institutions & Public Administration - General (102)
- Government - Non-U.S.
  - Government - Asia (28)
  - Government - Canada (12)
  - Government - Central & South America (11)
  - Government - Europe (45)
  - Government - Mexico (2)
- Government - U.S.
  - Local Government - U.S. (12)
  - Political Institutions & Public Administration - U.S., Executive Branch (18)
  - Political Institutions & Public Administration - U.S., General (50)
  - Political Institutions & Public Administration - U.S., Legislative Branch (6)
  - State Government - U.S. (23)
- Law - Non-U.S.
  - Law - Africa, Asia, Pacific & Antarctica (53)
  - Law - Americas, Latin America & West Indies (6)
  - Law - Canada (28)
  - Law - Europe, except U.K. (54)
  - Law - Great Britain (18)
- Law - U.S.
  - Constitutional Law - U.S. (74)
  - Criminal Law & Procedure - U.S. (40)
  - Disabled Legislation - U.S. (6)
  - Food, Drug & Cosmetics Legislation - U.S. (6)
  - Health Insurance and Medicare Legislation - U.S. (6)
  - Labor Law - U.S. (24)
Books and Government Documents. The number of books in relevant subject areas is provided by Library of Congress classification area and includes both print and ebooks. (Note, in some cases these numbers include bound and microform periodical items as well as books. An item generally equates to a volume.) Totals for the U.S. and California Government Document collections are also provided, but as with the book counts, not all materials will be relevant to ag business.

**Social Sciences = 46,705 volumes**
- Subclass HB Economic theory. Demography = 4,266
- Subclass HC Economic history and conditions = 6,847
- Subclass HD Industries. Land use. Labor = 15,034
- Subclass HE Transportation and communications = 993
- Subclass HF Commerce = 12,549
- Subclass HG Finance = 7,016

**Law = 10,199 volumes**
- Subclass KDZ America, North America
- Subclass KE Canada
- Subclass KF United States
- Subclass KG Latin America - Mexico and Central America - West Indies. Caribbean area
- Subclass KH South America
- Subclass KJ-KKZ Europe
- Subclass KL-KWX Asia and Eurasia, Arica, Pacific Area, and Antarctica

**Agriculture = 2,836 volumes**
- Subclass S Agriculture (General)
- Subclass SB Plant Culture
- Subclass SD Forestry
- Subclass SF Animal Culture
- Subclass SH Aquaculture. Fisheries. Angling

**Special Agriculture Areas**
- Subclass HD 1401-2210 Agriculture = 855
- Subclass HD 9000-9495 Agricultural industries = 489
- Subclass S 560-571.5 Farm economics. Farm management. Agricultural mathematics including production standards, record keeping, farmwork rates, marketing. = 20

**U. S. Government Document Collection = 46,048**

**California Government Document Collection = 7,867**
Dear Chairs,

On behalf of the economics department, I wanted to alert you to a new degree proposal (pilot) currently with the BPA curriculum committee. This is a '2+2' degree offered in collaboration with Bakersfield College. Students complete the AGBS degree from BC and transfer to CSUB to finish two years of upper-division agriculture business courses (already part of a concentration in business). There is a transfer model curriculum (TMC) for AGBS that the transfers would use. As part of their coursework at BC (or another community college), they would take courses in the agricultural sciences. I have attached the proposal to this email. Please feel free to contact me with any questions or concerns.

Thanks,
Aaron

-------------------
Dr. S. Aaron Hegde, Phd
Associate Professor of Economics and
Director, Environmental Resource Management Program
California State University, Bakersfield
9001 Stockdale Hwy, 20 BDC
Bakersfield, CA 93311
661.654.2495
661.654.2438 (fax)