

Career Launch Endorsement Review (CLER) Application



INSTITUTION: Columbia Basin College

PROPOSED PROGRAM: AAS in Agriculture Production and

BAS in Applied Management with Emphasis in Agriculture

Please note: **Registered Apprenticeship programs become automatically endorsed for Career Launch.**
You need not submit an application. You will be contacted with information this fall.

CONTACT INFORMATION

Name: Michael Lee


Title: Vice President for Instruction

Address: 2600 North 20th Avenue, Pasco, Washington 99301

Telephone: (509) 542-4399

FAX: _____

Email: mlee@columbiabasin.edu



Chief Academic Officer

2/28/2020
Date

Application contact: Scott A. Copeland
Associate Director, College Relations and Policy Guidance
Education Division
Washington State Board for Community and Technical Colleges
Office: 360-704-4397
Cell: 360-791-6026

Applications are reviewed monthly and are due the first business day of the month.

Electronic submissions only to scopeland@sbctc.edu

INTRODUCTION

Columbia Basin College's (CBC's) AAS in Agriculture Production Program and BAS in Applied Management with an Emphasis in Agriculture Program (i.e., Agriculture Technician Programs) are applying for Career Launch endorsement.

CBC is a federally recognized Hispanic-Serving Agricultural College (HSAC) currently offering an AAS in Agribusiness and a BAS in Applied Management with an Emphasis in Agriculture. The AAS in Agricultural Production with three agricultural certificates (Crop and Soil, Hydroponics and Greenhouse Management, and Precision Agriculture) will start in Fall 2020. This degree will prepare students for positions as technicians, crop advisors, hydroponic consultants, and field supervisors. Students will gain knowledge and skills in: crop management; crops, weeds, pests, and disease found in the basin; and production practices and technology involved in crop production. Students will also gain skills related to hydroponic and greenhouse production and management. The curricula was presented and supported by the Agriculture Advisory Committee, which consists of industry stakeholders, farmers, K-12 school employees, and agricultural employers in the region who are concerned about the rapidly growing need for more skilled agriculture technicians in the Washington-Oregon border area and the lack of qualified job applicants.

Students who wish to continue with their postsecondary agriculture education can enroll in CBC's existing BAS in Applied Management with an Emphasis in Agriculture program, which prepares students for agribusiness management and positions as technicians, agronomists, farm managers, crop advisors, sales representatives, plant operations technicians, and production specialists.

CBC has 23 acres of farmland where all agricultural students train in breeding, planting, transplanting, fertilizing, spraying, harvesting, threshing, grinding, and data collection. Students are also trained in irrigating fields using hand lines and pivot and get experience working in CBC's greenhouse. Students in both the AAS in Agriculture Production and BAS in Applied Management with an Emphasis in Agriculture receive hands-on, work-based training through experiential activities on campus and mandatory internships.

PROGRAM CHECKLIST

P1. Program description including length of program in years and total hours (including split between classroom and worksite).

TABLE 1
Program Description

Degree Credential	Length of Program	Hours	Classroom Hours	Work-Based Learning Hours
AAS in Agriculture Production	6 quarters	1,397	1,298	99
BAS in Applied Management with Emphasis in Agriculture	12 quarters	2,145-2,310	1,980	165 - 330

P2. Estimated number of hours per week at worksite and in classroom (this approach may shift throughout the program).

AAS Agriculture Production students will complete the first five quarters of their degree in classroom and lab training. Upon successful completion, students will enter into their final quarter and be placed in work-based learning agreements. During this final quarter, AAS students spend 9 hours per week at the

worksite and 15 hours per week in the classroom. Similarly, BAS students are placed in work-based learning agreements during their final quarter and spend 15-30 hours per week at the worksite and 10 hours per week in the classroom.

P3. Demonstration of labor market demand for specified skills/career in local region.

CBC’s service area of Benton and Franklin counties is a major agricultural production region with a high number of large agricultural industry employers including J.R. Simplot Company, Conagra Foods, Inc., Lamb Weston Holdings, Inc., Syngenta, and RDO Equipment. According to the most recent Regional Educational Needs Assessment (Michelau, Sedney, Falkenstern, & Monear, 2017), from 2007-2017, agriculture was one of the largest industry clusters in Southeastern Washington, experiencing 23% growth in job numbers. Projections through 2027 show that crop and animal production will continue to be one of the leading industry sectors in our area.

CBC’s new AAS in Agricultural Production will prepare students for careers such as agriculture and food science technicians, plant/farm operations technicians, field service technicians, irrigation specialists, and farm associates. Throughout the region, agricultural equipment operators/technicians and agricultural and food science technicians are in particularly high demand. From January 2019 to January 2020, there was an average of five unique job postings per month, but the number of actual hires greatly exceeded this amount, with an average of 202 employees hired per month, for an annual 2,424 hires (EMSI, 2020.1). According to EMSI’s workforce demand projections, a 6.1% increase in these jobs is projected from 2019 to 2029. CBC will offer the first AAS in Agriculture Production degree in our service area to meet these high workforce demands.

CBC’s existing BAS in Applied Management with Emphasis in Agriculture prepares students for careers such as agricultural business managers. In 2019, there were 3,327 of these jobs throughout our service area, which is approximately 2.5 times the national average. These positions are also in high demand, with an average of 332 hires per month from January 2019 to January 2020, for an annual total of 3,984 hires (EMSI, 2020.1). CBC is the only educational program in the area to offer a BAS in Applied Management with Emphasis in Agriculture degree, but with only three completions in 2019, the College cannot begin to keep up with the workforce demand.

P4. Projected count of student enrollment, student completion, and anticipated employer participation for 5 years, post-pilot.

**TABLE 2
Projected Enrollment, Completions, and Employer Participation**

Measurement	Baseline (2019-20)	Year 1 (2020-21)	Year 2 (2021-22)	Year 3 (2022-23)	Year 4 (2023-24)	Year 5 (2024-25)
AAS in Agricultural Production						
Student headcount	0	15	20	23	25	28
Completion	0	0	4	13	16	18
Employers	0	17	17	17	17	17
BAS in Applied Management with Emphasis in Agriculture						
Student headcount	3	5	8	10	12	15
Completion	3	1	2	2	3	6
Employers	17	17	17	17	17	17

Enrollment

We anticipate the Agriculture Production program will begin with 15 students and add between 3-5 students per year for the next five years. We also hope to increase BAS enrollments by between 2-3 students each year. In 2019, CBC received a grant from the U.S. Department of Agriculture's (USDA) National Institute of Food and Agriculture Hispanic Serving Institution (NIFA HSI) Educational Grant Program focused on increasing enrollment in CBC's agricultural programs. Grant activities include outreaching to high school students and undecided CBC students via campus tours and field days, and providing agricultural internships to students. Additionally, CBC is leveraging Perkins grant funding to hybridize the curriculum and increase the program's capacity to serve incumbent workers. These efforts, combined with Career Launch funding to purchase the equipment necessary for conducting the program, are anticipated to increase enrollments over the next five years.

Completion

CBC anticipates relatively high program completion rates, based on the historical rates of CBC's existing AAS-T agricultural and BAS students. Additionally, CBC is currently implementing the Guided Pathways initiative, which is anticipated to have a positive impact on completion rates by the end of the pilot phase. The maps and sequences are currently in collaborative review by advisors and completion coaches with deans and program leads. Completion coaches will be assisting students with their educational options, planning an academic path towards graduation.

Employer Participation

The BAS program currently employs students as student workers/interns on campus for CBC's Agricultural Research division, as well as places students with external employers. CBC's Agricultural Program is deeply connected to the workforce through its Advisory Board and currently partners with 17 different employers (Table 3, Section IR-1) to place students in a variety of settings including agriculture industries, farms, and universities. The current program excels at placing students in internships and jobs in the agriculture industry, and currently there are more employers requesting student placements than students available. Increasing the number of program participants available to begin working will directly address regional workforce needs and continue to ensure students have engaging and productive work experiences as they transition to the workplace.

P5. Concise description of development process to create the Career Launch program (e.g. who was involved, when, how was the program piloted, etc.)

Over the last few years, CBC's Agriculture department director, faculty, staff and Advisory Board members have seen a need to offer a professional-technical degree in Agriculture Production to meet the high workforce demands in the community. Agriculture director, faculty and staff worked with industry leaders and educators to design the new degree with the vision for the program to graduate agriculture technicians who can enter the workforce above entry-level positions. The degree program recently received CBC's Curriculum Committee's approval, and the Program Approval Request will be submitted to SBCTC in March 2020.

CBC started the BAS in Applied Management with an emphasis in Agriculture in 2017. This effort was also the result of a collaboration between CBC staff/faculty and the Advisory Committee to meet workforce demand in our community.

While the demand for agricultural technicians and managers in our area is high, enrollments in CBC's existing agricultural programs has been historically low. Program director, faculty, staff, advisory board members, and college administration see alignment between the AAS and BAS programs' growth goals

and a Career Launch endorsement. An endorsement would allow CBC's Agricultural Programs to expand program capacity, enhance the student experience, and deepen employer relationships.

P6. Signed letter of endorsement from all relevant partners, stakeholders and regional networks (including employers, labor organizations, academic institutions, community based organizations, individuals, and other relevant stakeholders in support of the proposed Career Launch program). Regional network endorsement preferred.

Letters of endorsement are included in Attachment A.

P7. Description of resources, supports, or other processes to recruit and support students from underserved backgrounds (e.g. including students of color, students from low income families, English language learners, students with disabilities, foster students, students experiencing homelessness, students from single parent homes, and other populations that face barriers to employment); or create an implementation plan to do so.

As a federally designated HSI and HSAC, CBC is dedicated to providing educational opportunities to students from diverse and underserved backgrounds. In CBC's service area, a significant portion of the population consists of migrant and seasonal farmworkers from Mexico, who often view agriculture as a low-income career. CBC's USDA HSI grant is specifically focused on educating students, parents, and teachers, particularly in low-income and Hispanic majority school districts, on the career opportunities available in the agricultural industry.

Once on campus, CBC has a tremendous amount of resources to support low-income and underrepresented students, including CBC Foundation scholarships, a food pantry; child care assistance; an emergency assistance fund to assist with short-term housing, transportation, or health care needs; and a holiday adopt-a-family program. CBC's Disability Support Services Center provides accommodations for students with disabilities, including adaptive technology to support a broad range of disabilities.

On-campus support programs are also available for specific types of students, including:

- ▶ Basic Food, Employment, & Training (BFET) – provides financial, advising, enrollment, and ongoing support services for low-income students enrolled in workforce education programs
- ▶ College Assistance Migrant Program (CAMP) – provides academic, career, financial, and support services for first-year students from migrant/seasonal farmworker backgrounds
- ▶ Student Support Services (SSS) – provides academic advising, financial literacy, educational counseling, tutoring, and career/transfer planning services for low-income, first generation students and students with disabilities
- ▶ Mathematics, Engineering, Science Achievement (MESA) – provides educational support services, cultural events, and campus visits for underrepresented students preparing for university-level studies in STEM fields
- ▶ Veterans Education and Transition Services (V.E.T.S.) Center – supports military connected students through customized academic advising, education benefits certification, workshops tailored to veteran student success, and access to the Veterans Integration to Academic Leadership (VITAL)

INDUSTRY-RELATED CHECKLIST

I-R1. Address of worksite(s) where Career Launch students will complete supervised training.

TABLE 3
Work-Based Learning Employer Partners

No.	Employer	Address
1.	Ag Development	2621 Ringold Road, Eltopia, WA 99330
2.	AgriNorthwest	6716 W Rio Grande, Kennewick, WA 99336
3.	Agri-Service	1620 E James St, Pasco, WA 99301
4.	BioGro, Inc.	681 Glade Rd, Mabton, WA 98935
5.	ConAgra Foods, Inc.	960 N Glade Rd, Pasco, WA 99301
6.	Helena Chemical	1330 Kartchner St, Pasco WA 99301
7.	Irrigation Specialists	2410 N 4th Ave, Pasco WA 99301
8.	Lamb Weston	2013 Saint St, Richland, WA 99354
9.	Nutrien Ag Solutions	St Helens St, Pasco, WA 99301
10.	Oregon State University	2121 S 1st St, Hermiston, OR 97838
11.	RDO	1707 E James St, Pasco WA 99301
12.	Simplot Frozen Vegetables	1825 N Commercial Ave, Pasco, WA 99301
13.	Simplot Grower Solutions	2430 E Foster Wells Rd, Pasco, WA 99301
14.	Syngenta	5516 Industrial Way, Pasco WA 99301 1539 W Lee Rd, Othello, WA 99344
15.	Valmont Northwest	4225 N Capitol Ave, Pasco, WA 99301
16.	Washington State University	404 W Clark St, Pasco, WA 99301
17.	Wilbur-Ellis	150 Burlington St, Pasco WA 99301

I-R2. Hourly wage for Career Launch participants.

Participants start at minimum wage (\$13.50/hour) with regular pay increases as skills advance.

I-R3. List of entry-level positions and associated job descriptions for which a Career Launch student would be eligible for upon completion.

TABLE 4
Career Launch Positions and Job Descriptions

Employer	Position and Link to Job Description
Lamb Weston Inc.	Manager - Fertilizer
Nutrien Ag Solutions	Field Scout
RDO	Field Service Technician
RDO	Precision Ag Intern
Simplot	Intern – Field Operations
Simplot	Feedlot Cowboy
Syngenta	Seed Planner – Vegetables
Valmont Industries, Inc.	Irrigation Specialist
Wilbur-Ellis	Branded Products Territory Manager
Varies	Agriculture Business Manager
WSU Franklin County Extension	Agricultural Research Technologist 2

I-R4. List of specific skills and competencies required for completion of the Career Launch program, with demonstrated alignment to entry-level positions, job descriptions, and average local salary ranges.

TABLE 5
Program Learning Outcomes and Alignment to Current Job Descriptions

Program Outcomes	Alignment to Job Descriptions
AAS in Agricultural Production	
Identify and describe crop varieties, pests, diseases, and weeds from planting through harvesting.	<ul style="list-style-type: none"> ▸ Provide accurate scouting reports and recommendations based on crop stages and weed identification ▸ Take soil and water samples ▸ Check and identify bug traps ▸ Understand and assist the process of fertilizer blending ▸ Provide support through communication, reporting, and data analysis on the critical interface between brand, supply planning, production scheduling and logistics to develop variety and site-specific conditioning schedules
Articulate and demonstrate proper safety procedures in all aspects of crop production.	<ul style="list-style-type: none"> ▸ Maintain and observe safe working conditions at branch locations and report any unsafe working conditions to facility manager ▸ Follow all safety rules and regulations while performing work assignments and adhere to all policies and procedures as specified in company manuals
Demonstrate proper use of production equipment and maintenance.	<ul style="list-style-type: none"> ▸ Perform in-field machinery diagnostics and repairs ▸ Diagnose, inspect, recondition, repair, assemble, and service equipment ▸ Maintain a clean work area, as well as care for all shop tools, machines, and equipment
Utilize precision techniques in crop production and irrigation.	<ul style="list-style-type: none"> ▸ In-field water management strategies, soil moisture monitoring, and data interpretation ▸ Variable rate irrigation scheduling design, prescriptions, and adjustments ▸ Troubleshooting technical issues ▸ Conduct field inspections for soil moisture content and verify water distribution effectiveness ▸ Assist with development of methodology to implement grower soil moisture programs and make recommendations regarding the selection of soil moisture equipment and monitoring software
Describe systems of production and management of animal husbandry	<ul style="list-style-type: none"> ▸ Monitors cattle by riding the feedlot pens on horseback to identify sick, injured, or stressed animals ▸ Assists with the receiving, unloading, sorting, and processing of cattle as assigned by the Feedlot and/or Cattle Manager ▸ Moves cattle from pen to pen to rotate cattle according to production schedules ▸ Trains, shoes, feeds, and medically treats horses

**TABLE 5 (cont.)
Program Learning Outcomes and Alignment to Current Job Descriptions**

Program Outcomes	Alignment to Job Descriptions
BAS in Applied Management with Emphasis in Agriculture	
Demonstrate comprehension of agriculture business and marketing.	<ul style="list-style-type: none"> ▸ Excellent business skills, including knowledge of accounting and bookkeeping, to manage financial records and client transactions ▸ Superb communication skills ▸ Employee management and decision-making skills
Analyze and apply managerial functions, roles, styles, and effective strategies for stability and change, to be used in various managerial and leadership situations.	<ul style="list-style-type: none"> ▸ Supervises employees ▸ Assigns job duties and hours (as needed daily or weekly) ▸ Manages the hiring of new employees ▸ Determines employee wages ▸ Oversees training of new employees ▸ Directs cross training of employees ▸ Continually evaluates employee work and workload and employee performance
Analyze workplace scenarios to show how careful attention to members of a diverse population can result in significant competitive advantages.	<ul style="list-style-type: none"> ▸ A high degree of leadership ability including building relationships with cross-functional team members ▸ Resolves any employee problems and ▸ Continues to build a good crew that will work together as a team
Develop and demonstrate an understanding of the four primary resources of management (human, capital, informational, and material).	<ul style="list-style-type: none"> ▸ Ability to assist with creating and maintaining product sales support materials for the region with assistance and direction from the Branded Products and Strategic Marketing teams ▸ Follow corporate, Branded Products Team and Wilbur-Ellis brand strategies ▸ Experience Managing a Sales Portfolio and executing on a written Business Plan
Apply the four primary functions of management (planning, organizing, leading, and controlling) through a variety of situations.	<ul style="list-style-type: none"> ▸ Ability to support the development and implementation of internal and external marketing programs ▸ Promote products that provide value for our crop selection ▸ Performing and assisting with internal Sales Team, Dealer and Grower product meetings ▸ Providing pricing guidance to the field sales staff on Branded Products ▸ Assisting in developing annual area, branch and person sales goals ▸ Provide Branded Product communication to all levels of Wilbur-Ellis within the region, including product introductions, product updates/positioning and other product support materials that are developed
Demonstrate critical operations, tactical, and strategic managerial thoughts in a variety of scenarios.	<ul style="list-style-type: none"> ▸ Ability to assist with creating and maintaining product sales support materials for the region with assistance and direction from the Branded Products and Strategic Marketing team ▸ Enhancing the ability to meet and exceed sales goals

Average salaries for select agricultural positions in Washington are outlined below:

- ▶ Agricultural Technician – [\\$44,043/year](#)
- ▶ Agricultural Mechanic – [\\$47,426/year](#)
- ▶ Agronomist – [\\$51,625/year](#)

I-R5. Employer attests that Career Launch program is in compliance with required federal, state, and local regulations.

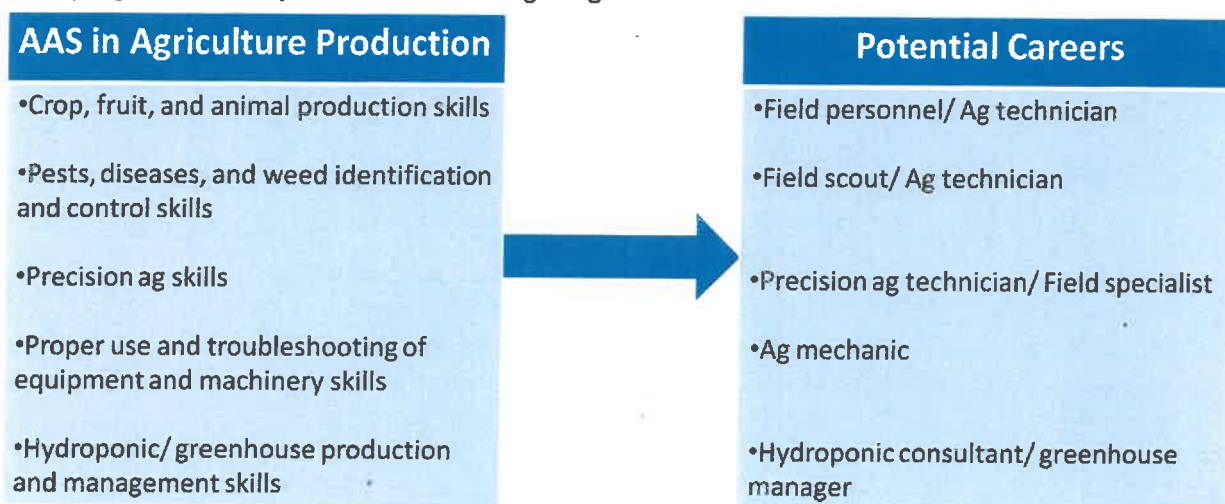
See letters of endorsement in Attachment A.

I-R6. Employers will outline a student supervision and mentorship model.

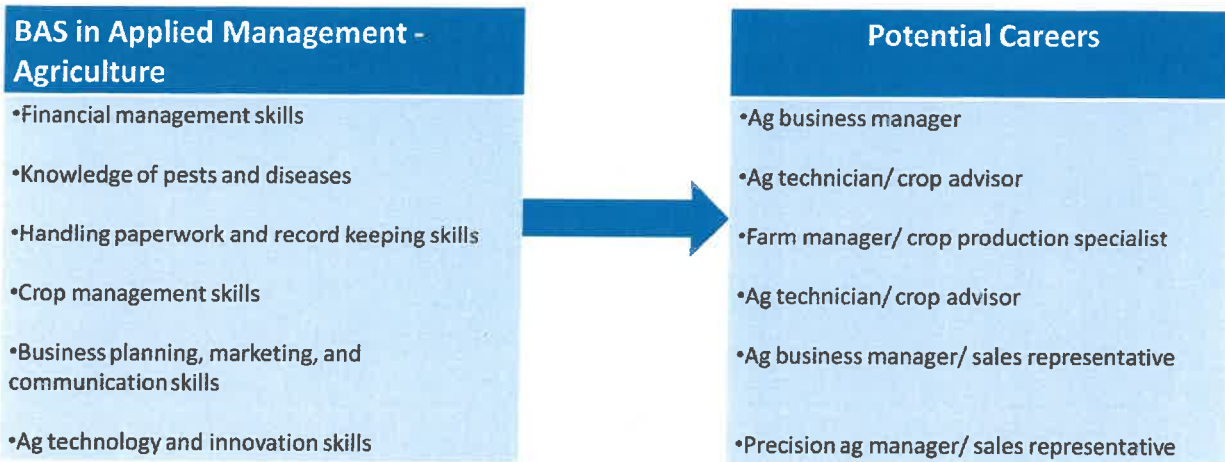
Employers will integrate Career Launch participants into a production team. The student’s supervisor will assign them an on-the-job trainer who will work closely with the student to learn skills such as planting, fertilizing, irrigating, scouting pests and diseases, collecting data, meeting with growers, attending meetings/conferences, and conducting presentations. As the student develops their basic skills, they will be assigned increasingly sophisticated tasks. They will also be assigned to shadow area technicians as they perform preventive maintenance, troubleshoot problems, review data, and do other associated tasks. Students will begin to perform basic agronomy, production, and technology as skills allow. As students progress in the AAS and BAS pathway at CBC, the supervisor will assign them additional tasks to support learning and integrate academic curriculum with the job site. Students will have a standing weekly meeting with their supervisor to discuss challenges and successes. They will receive mentoring and coaching to help resolve issues and inform continuous improvement for the program overall.

I-R7. Description of common career pathway(s) beginning with entry-level position specified with demonstration of likely salary growth over specified time period.

The AAS and BAS Agriculture Technician Programs provide immediate employer-recognized skills and credentials at every level. The AAS Program will have a wide spread of typical salaries due to the variety of skills and positions it covers. CareerOneStop lists the range of hourly salaries in the Kennewick-Richland metro areas starting from \$18.21/hour for AAS (Agriculture Technicians) and ranging from \$33.00/hour to \$52.82/hour for BAS (Ranchers and other Agricultural Managers). The AAS and BAS Agriculture Technician Programs will prepare students to work in many industries, increasing their starting pay, and furthering their career progression through a combination of technical abilities learned in the program and the possession of a college degree.



After completing an AAS degree, students looking to progress in higher education can transfer into CBC's BAS in Applied Management with Emphasis in Agriculture.



A diagram showing the specific AAS and BAS degree pathways is included in Attachment B.

I-R8. Demonstrated competency alignment with relevant professional standards for specified entry-level positions when applicable.

There are no national professional standards identified for these occupations. Regional competency alignment with relevant professional standards was included during the curriculum development for both the AAS and BAS degrees via coordination with Advisory Committee members. An overview of results is included in I-R4, with program outcomes.

I-R9. Signed letter from employers partners attesting that Career Launch completers will be ready for specified entry-level jobs, including an optional, non-binding commitment estimating number of Career Launch completers they plan to interview/hire over the first three years of the program. See employer letters in Attachment A.

ACADEMIC-RELATED CHECKLIST

A-R1. List of academic institution(s) providing career-aligned instruction for Career Launch program.
Columbia Basin College

A-R2. Curriculum scope and sequence aligned to skills and competencies provided in employment checklist.

A scope and sequence of courses for both the AAS and BAS programs are included in Attachment C. After successful completion of the AAS in Agricultural Production, students will be able to:

- ▶ Identify and describe crop varieties, pests, diseases, and weeds from planting through harvesting.
- ▶ Articulate and demonstrate proper safety procedures in all aspects of crop production.
- ▶ Demonstrate proper use of production equipment and maintenance.
- ▶ Utilize precision techniques in crop production and irrigation.
- ▶ Describe systems of production and management of animal husbandry.
- ▶ Demonstrate comprehension of agriculture business and marketing.

- ▶ Articulate well-considered ideas and written claims to an academic audience, using effective rhetorical techniques, properly credited evidence, and a command of Standard English.
- ▶ Demonstrate interpersonal/human relations skills.
- ▶ Demonstrate and clearly explain an effective strategy to solve a quantitative problem.

After successful completion of the BAS in Applied Management with an Emphasis in Agriculture, students will be able to:

- ▶ Demonstrate comprehension of agriculture business and marketing.
- ▶ Analyze and apply managerial functions, roles, styles, and effective strategies for stability and change, to be used in various managerial and leadership situations.
- ▶ Analyze workplace scenarios to show how careful attention to members of a diverse population can result in significant competitive advantages.
- ▶ Develop and demonstrate an understanding of the four primary resources of management (human, capital, informational, and material).
- ▶ Apply the four primary functions of management (planning, organizing, leading, and controlling) through a variety of situations.
- ▶ Demonstrate critical operations, tactical, and strategic managerial thoughts in a variety of scenarios.

A-R3. Demonstration of student supports (e.g. mentoring, advising, financial aid, tutoring) available for Career Launch students enrolled in the course.

In addition to the population-specific support programs and services listed in P7, CBC offers a wide variety of support services for all enrolled students.

- ▶ The Counseling/Advising Center assists students in their personal, educational, and professional growth and planning. AAS and BAS Agriculture Technician Programs students receive academic advising specified to the degree completion directly from the School of Math, Science and Engineering Completion Coaches. To ensure cohort scheduling and graduation progress, all students will be required to meet with the Completion Coaches prior to each quarter for course registration. In coordination with the Completion Coaches, counselors will plan career, job search, and personal/professional development workshops throughout the year to sustain the agriculture students' interest in the field. Counselors will also help the students gain broader knowledge about the industry through career focused workshops and career demonstration activities annually. Counselors are registered by the state of Washington to provide personal counseling and assist students with issues that may affect their academic performance or progress in meeting their educational goals. Counselors will provide short-term personal counseling and refer students to community mental professionals if needed.
- ▶ The Academic Success Center provides student's free drop-in and online tutoring in writing, math, accounting, biology, chemistry, physics, and Spanish. The Center is equipped with computers and printers for student use, as well as whiteboards and group study areas.
- ▶ The Library has 220 laptops available for student checkout, so students who lack computers are able to complete homework, conduct research, and check email off campus. Additionally, the Library and online library databases provide articles necessary for both lower and upper level courses. The School of Math, Science, and Engineering will regularly communicate with the library to ensure that all AAS and BAS Agricultural Technician course materials including textbooks and reading lists are up-to-date and available.
- ▶ The Financial Aid department provides workshops and assistance applying for federal and state financial aid. Once students have submitted their applications, Financial Aid staff work with

students to build a financial aid package that is an optimum combination of grants, scholarships. Student employment and loans based on the students eligibility and program rules.

- ▶ CBC Foundation offers a variety of scholarships for students based on many factors including academic achievement, field of study, and financial need. In 2018-19, the Foundation awarded over \$1.1 million in scholarships.

The Agriculture Department Director, completion coach, faculty, and staff will be responsible for directing students to the appropriate services and resources for successful completion of their degree.

A-R4. Number of postsecondary credits provided and/or credential earned upon completion of program.

Students in the AAS Agricultural Production program will complete 98 credits upon graduation, and students in the BAS in Applied Management with an Emphasis in Agriculture will complete 180 credits.

A-R5. Demonstrated curricular alignment with relevant professional and/or academic standards associated with coursework and credential, when applicable.

Upon completion of the AAS in Agricultural Production degree, students will have completed 20 credits of General Education Requirements, as required by accreditation through the Northwest Commission on Colleges and Universities (NWCCU) with identified outcomes in the areas of communication and computation that align with and support program goals or intended outcomes. In addition, students complete 78 credits of agriculture production and lab skill development.

Upon completion of the BAS in Applied Management with an Emphasis in Agriculture degree, students will have completed 60 credits of General Education Requirements, as required by accreditation through the Northwest Commission on Colleges and Universities (NWCCU) with identified outcomes in the areas of communication, computation, and human relations that align with and support program goals or intended outcomes. In addition, students complete 60 credits of major support, and 60 credits of agriculture skill development.

A-R6. Details of potential for current or future partnerships and/or scalability of the program within and across sectors and/or geographic locations (e.g. articulation, degree pathways), when applicable.

The AAS in Agriculture Production students can enroll in CBC's BAS in Applied Management with an Emphasis in Agriculture or transfer to bachelor's programs including WSU's Viticulture and Enology Program or OSU's Agricultural Sciences program.

Students who complete the BAS in Applied Management with an Emphasis in Agriculture can continue their postsecondary education at WSU's Tri-Cities campus, which offers a master's program in Viticulture and Enology. Our two institutions will continue to collaborate to serve the local employment needs by working on an articulation agreement to Master's program pathway.

ATTACHMENT A-1



February 14, 2020

815 N. Kellogg Street, Suite C
Kennewick, WA 99336
509-734-5980
Fax 509-734-5999
www.Bentonfranklinwdc.com

Washington State Board for Community and Technical Colleges
1300 Quince St. SE
Olympia, WA 98504

RE: Columbia Basin College AAS and BAS Agriculture Technician Programs
Career Launch Endorsement

EXECUTIVE COMMITTEE

Todd Samuel
Board Chair
Technical Group Manager
PNNL

Melanie Olson
Director
Lourdes Counseling Center

Dennis Williamson
Training Director
Electricians Union IBEW

Amanda Jones
Vice President
Community First Bank

Adolfo de León
CSO Administrator
DSHS

COUNTY OFFICIALS

Benton County
Commissioner James Beaver

Franklin County
Commissioner Clint Didier

EXECUTIVE DIRECTOR/CEO

Tiffany Scott

To Whom It May Concern,

Benton-Franklin Workforce Development Council is excited to support the Columbia Basin College AAS and BAS Agriculture Technician Career Launch Programs. Benton-Franklin Workforce Development Council is the workforce development board serving Benton and Franklin counties, and invests much of our time and talent in bringing together stakeholders from business, economic development, education, labor, government, nonprofit and community organizations to identify and address the regional workforce needs of specific industries and job seekers.

Benton-Franklin Workforce Development Council recognizes the need for public-private partnerships that provide youth with career pathways and provide employers with competitive candidates to meet their business needs. Through curriculum developed in partnership with employers and industry, combined with meaningful, high quality on-the-job experience, the AAS and BAS Agriculture Technician Career Launch Programs will be an exemplary program serving our students and community.

Our organization is committed to supporting state and local programs seeking opportunities to serve the Benton-Franklin region. We are confident that with the AAS and BAS Agriculture Technician Programs Career Launch programs, we will continue to benefit our population seeking post-secondary education through local community colleges. These programs will be vital to meeting our regional workforce needs and we support the endorsement of the AAS and BAS Agriculture Technician Programs. We look forward to working with Columbia Basin College to ensure these programs will be successful.

Sincerely,

A handwritten signature in blue ink that reads "Tiffany A. Scott".

Tiffany Scott, CEO
Benton-Franklin Workforce Development Council



RE: Columbia Basin College AAS and BAS Agriculture Technician Programs Career Launch Endorsement

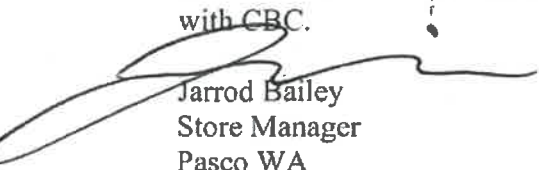
Washington State Board for Community and Technical Colleges

RDO Equipment Co would like to offer this letter of endorsement to the Columbia Basin College Agricultural Production Programs for Career Launch Endorsement. We have an outstanding relationship with the Community and Technical College system. We serve on the Columbia Basin College Agriculture Advisory Committee and work together to create pathways to employment through educational programs and work-based learning opportunities.

RDO Equipment Co participates in the work-based learning component of the agricultural production program by providing on-the-job paid experience to students. Students must meet the minimum qualifications, sit for an interview, and be 'hired-on' in order to participate in this experience. The Precision Ag Intern will allow the student to gain understanding of the skills necessary to advance into a Product Specialist role within RDO Equipment Co. They will learn RDO Equipment Co. processes and procedures used throughout the organization including an understanding of the Parts, Service, Sales, and Management departments. The Precision Ag Intern will serve as a part-time position, typically before the start of a student's senior year in college. After successful completion of the summer internship and college graduation, management can offer full time employment and the student can begin the Product Specialist Trainee program. Students who participate in our work-based learning experience earn comparable industry wages, college credit, and valuable work experience under the guidance of a journey-level worker who provides mentorship and supervision. We work closely with CBC to ensure students placed with us are trained on, and adhere to, federal, state, and local regulations covering the work and workplace.

Upon review of the AAS and BAS Agriculture Programs curriculum and work-based learning, it is clear that graduates of the program will be prepared for entry-level and beyond in-demand positions in the industry such as Field Service Technician, Service Administrator, and Precision Ag Intern. CBC's Agriculture Technician Program will prepare students with a rigorous and through curriculum that aligns with industry competencies. We are prepared to offer successful graduates, who meet our employment qualifications, interviews, and potential employment based on our hiring needs.

Please feel free to contact me for more information about this endorsement and our partnership with CBC.



Jarrod Bailey
Store Manager
Pasco WA

ATTACHMENT A-3



J.R. Simplot Company
P.O. Box 27, Boise, Idaho
83707 0027

RE: Columbia Basin College AAS and BAS Agriculture Technician Programs Career Launch
Endorsement

Washington State Board for Community and Technical Colleges

February 19, 2020

To Whom It May Concern,

The J.R. Simplot Company would like to offer this letter of endorsement to the Columbia Basin College (CBC) AAS and BAS Agriculture Technician Programs for Career Launch Endorsement. Simplot has representation on the Columbia Basin College Agriculture Advisory Committee and work together to create pathways to employment through educational programs and work-based learning opportunities.

The Grower Solutions division of Simplot participates in the work-based learning component of the AAS and BAS Agriculture Technician Programs by providing on-the-job paid experience to students. The Precision Ag Internship position will allow the student to gain an understanding of the skills necessary to advance into a Product Specialist role within Simplot. They will learn Simplot processes and procedures used throughout the organization including an understanding of the Parts, Service, Sales, and Management departments.

Students who participate in our work-based learning experiences earn comparable industry wages, college credit, and valuable work experience under the guidance of a journey-level worker who provides mentorship and supervision. We work closely with CBC to ensure students after their graduation from the program are trained, and adhere to, federal, state, and local regulations covering the work and workplace. The J.R. Simplot Company looks forward to engaging with CBC on multiple levels, including input on student learning opportunities where appropriate, hosting interns if selected through our recruitment process, and providing feedback into pedagogical and curriculum improvements.

Upon review of the AAS and BAS Agriculture Programs curriculum and work-based learning, it is clear that graduates of the program will be prepared for entry-level and in-demand full time positions in the industry. CBC's Technician program will prepare students with a rigorous and thorough curriculum, which aligns with our industry competencies.

Please feel free to contact me for more information about this endorsement and our partnership with CBC.

Sincerely,

A handwritten signature in black ink that reads "Patrick Williams". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Patrick Williams
Area Precision Ag Manager
J.R. Simplot Company
Grower Solutions





February 24, 2020

Washington State Board for Community and Technical Colleges

RE: Columbia Basin College AAS and BAS Agriculture Technician Programs Career Launch Endorsement

I am writing this letter in support of Columbia Basin College's AAS and BAS Agriculture Technician Programs Career Launch Endorsement. The Agricultural industry in central Washington State is vibrant and expanding, requiring more trained professionals continually. I regularly hear from industry partners who are eager to find individuals to hire who have training and experience pertinent to the agricultural industry, specifically with hands on experience.

I serve on the advisory board for Columbia Basin College's Agriculture Program, and for many years have offered paid internships to students enrolled in their Agriculture Program. The internships require that the students apply with written application materials and a face to face interview. Once they are hired as an intern, they are required to assist with applied research projects that introduce them to vegetable crop production and research. This gives the students opportunity to apply what they have learned to date and think about what else they may need to learn before they enter the workplace. It is important to provide internship opportunities for students to prepare them for the workplace and to help inspire the students to make their classroom experience more meaningful. I am convinced of the value of internships and will continue to provide those opportunities to students who are interested.

I have hired many interns from Columbia Basin College's agriculture program and am eager to see their continued success.

Regards,

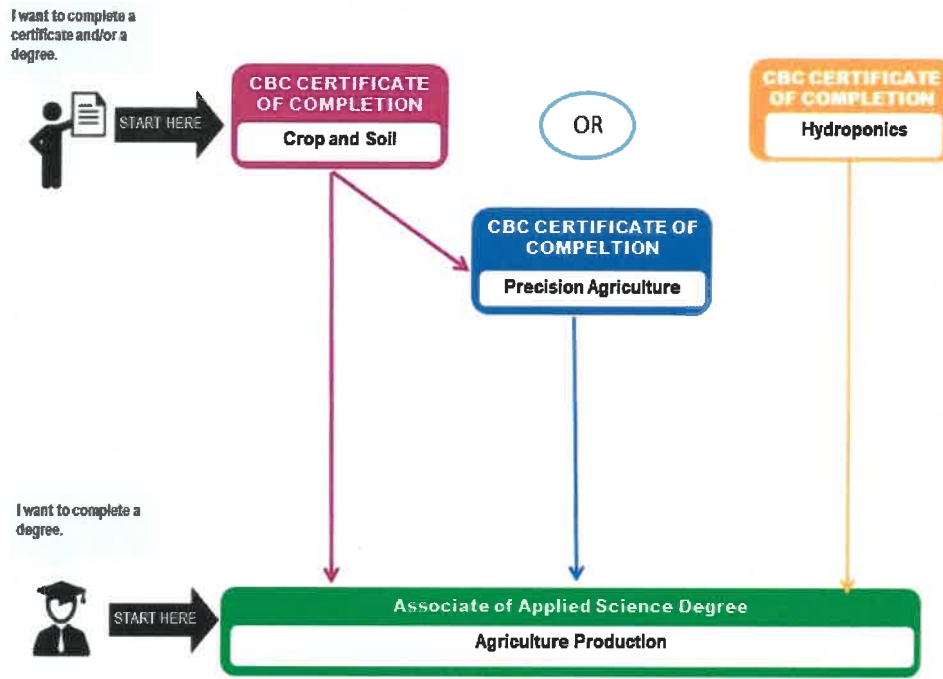
A handwritten signature in black ink, appearing to read "Tim Waters". The signature is stylized and somewhat cursive, with a long horizontal line extending to the right.

Tim Waters, Ph.D.

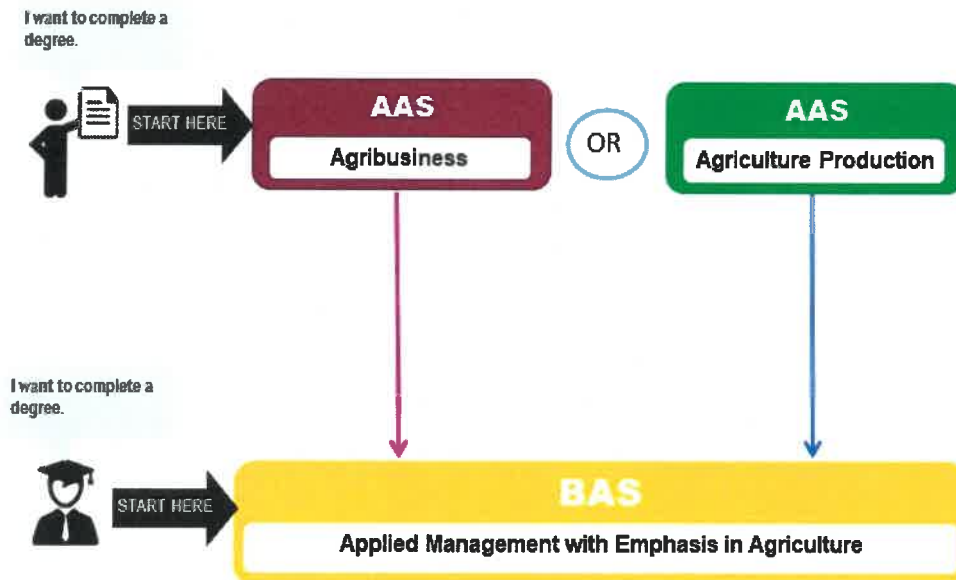
Professor and Regional Vegetable Specialist
Washington State University Extension
Franklin & Benton Co.
404 W. Clark Ave.
Pasco, WA 99301
509 545-3511 Phone
twaters@wsu.edu

ATTACHMENT B

AAS in Agricultural Production Degree Pathway



BAS in Applied Management with an Emphasis in Agriculture





ACADEMIC PLANNING WORKSHEET

Name: Harvey the Hawk (2-Year Agriculture Production - Student No Transfer) Date: 02/27/2020

Degree or Certificate : AAS-Agriculture Production Estimated Completion Quarter/Year: 2022

Quarter #1

FA - W - SP - SU Year: 2020

Course & Number	Credits
AG 101	4
AG 205	4
ENGL& 101	5
AFS 101	5
Total Credits	18

Quarter #2

FA - **W** - SP - SU Year: 2021

Course & Number	Credits
MATH& 107	5
MATH& 146	
AG 117	4
AG 107	3
AG 221	3
Total Credits	15

Quarter #3

FA - W - **SP** - SU Year: 2021

Course & Number	Credits
CHEM& 110	5
AG 140	4
AG 181	4
BIOL 201	5
Total Credits	18

Quarter #4

FA - W - SP - SU Year: 2021

Course & Number	Credits
AG 232	4
AG 222	4
AG 250	4
CS 101	5
Total Credits	17

Quarter #5

FA - **W** - SP - SU Year: 2022

Course & Number	Credits
HORT 242	4
HORT 202	5
AG 289	5
Total Credits	14

Quarter #6

FA - W - **SP** - SU Year: 2022

Course & Number	Credits
CMST& 220	5
HORT 203	5
HORT 235	3
AG 297	3
Total Credits	16

Quarter #7

FA - W - SP - SU Year: _____

Course & Number	Credits
Total Credits	

Quarter #8

FA - W - SP - SU Year: _____

Course & Number	Credits
Total Credits	

Quarter #9

FA - W - SP - SU Year: _____

Course & Number	Credits
Total Credits	

Quarter #10

FA - W - SP - SU Year: _____

Course & Number	Credits
Total Credits	

Quarter #11

FA - W - SP - SU Year: _____

Course & Number	Credits
Total Credits	

Quarter #12

FA - W - SP - SU Year: _____

Course & Number	Credits
Total Credits	



ACADEMIC PLANNING WORKSHEET

Name: Harvey the Hawk (4-Year Applied Management-Agriculture Student No Transfer) Date: 02/26/2020

Degree or Certificate : BAS-Applied Management-Agriculture Concentration Estimated Completion Quarter/Year: 2024

Quarter #1

FA - W - SP - SU Year: 2020

Course & Number	Credits
AFS 101	5
BUS& 101	5
ENGL& 101	5
Total Credits	15

Quarter #2

FA - **W** - SP - SU Year: 2021

Course & Number	Credits
AG 102	5
CHEM& 140	5
ENGL& 235	5
Total Credits	15

Quarter #3

FA - W - **SP** - SU Year: 2021

Course & Number	Credits
BIOL 201	5
BIOL 252	5
MATH& 146	5
Total Credits	15

Quarter #4

FA - W - SP - SU Year: 2021

Course & Number	Credits
ACCT& 201	5
BIOL 140	5
ECON& 201	5
Total Credits	15

Quarter #5

FA - **W** - SP - SU Year: 2022

Course & Number	Credits
ACCT& 202	5
AG 289	5
CS 101	5
ECON& 202	5
Total Credits	20

Quarter #6

FA - W - **SP** - SU Year: 2022

Course & Number	Credits
BUS& 201	5
CMST& 210	5
PSYC& 100	5
	5
Total Credits	15

Quarter #7

FA - W - SP - SU Year: 2022

Course & Number	Credits
AMGT 300	5
AG/AMGT 310	5
ENGL 410	5
Total Credits	15

Quarter #8

FA - **W** - SP - SU Year: 2023

Course & Number	Credits
AMGT 320	5
AMGT 417	5
ENVS 310	5
Total Credits	15

Quarter #9

FA - W - **SP** - SU Year: 2023

Course & Number	Credits
AG/AMGT 340	5
ICS 310	5
PHIL 305	5
Total Credits	15

Quarter #10

FA - W - SP - SU Year: 2023

Course & Number	Credits
AMGT 330	5
AMGT 400	5
AMGT 420	5
Total Credits	15

Quarter #11

FA - **W** - SP - SU Year: 2024

Course & Number	Credits
AG/AMGT 430	5
ECON 305	5
Total Credits	10

Quarter #12

FA - W - **SP** - SU Year: 2024

Course & Number	Credits
AMGT 350	5
AMGT 360	5
AG 480	5
Total Credits	15