

Eastern Wyoming College

Instructional Program Review 2011 - 2012

Program: Agriculture Cluster

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EASTERN WYOMING COLLEGE Instructional Program Review

Program Name: Agriculture Cluster

Part I: Statistical Data from the past three years:

	2008-2009	2009-2010	2010-2011	5-Year Average
Annualized FTE Enrollment	50.8	45.3	40.2	43.7
Annualized FTE Faculty	4.7	3.8	3.4	3.5
# Students	63	67	56	59
# Graduated	10	13	5	9

FTE = Full-time equivalent Notes:

Modes of Delivery:

online compressed video face-to-face

Advisory Committee Members and Title or Role:

Greg Asa	Local Ag producer
Jason Groene	Torrington High School Ag teacher/FFA Advisor
Kelly Groene	Adjunct EWC Ag instructor
Heather Haas	Local Ag producer
Dave Hansen	Bank Ag loan officer
Doug Hubbard	Ag producer
Lowell Kautz	Ag producer
Brett Miller	Ag producer
Christine Miller	Ag producer
Ron Miller	Ag equipment dealer
Matt Moore	Cattle buyer
Brent Mullock	Bank Ag loan officer
Ross Newman	Ag producer and County Commissioner
Lisa Ochsner	Ag producer
Bob Pedulla	Scottsbluff, NE, High School Ag teacher/FFA Advisor
Clay Peterson	Ag producer
Wells Raben	Ag producer
Dixie Roth	Ag producer
Jay Teichert	Ag salesman

Community Partners or Internships:

The Eastern Wyoming College Agriculture Program collaborates and has developed working relationships with numerous producers, businesses, and institutions throughout our region. Local agriculture business and financial institutions continuously assist in helping students gain hands-on experience. The Agriculture Education program has also developed a relationship with

Goshen County Schools for classroom observation and practicum. The following is a list of some of those partnership and/or internship locations:

UW SAREC	University of Wyoming Extension	Horizon West, Inc.
George Oschner Ranch	Cheery Creek Angus	Lippencott Feeding
Miller Feedlot	M Lazy Heart Ranch	Jeff Chapman Family
Scott & Allison Salo	Scott & Teresa Forrest	Al & Kay McKee
Weinreis Brothers	McAllister Irrigation	Hubbard Farms
Doug Booth Family Angus	Ken & Heather Haas	Z & W Mill
Jones & Eddington Law Firm	Wilson Ranch	Arrow Crown Angus
High Plains Feedyard	Jami Huckfeldt	Cullen Ranch
Don Bruner Feed Sales	Cache Creek Cattle Company	Dennis & Judi Fogle
Feff Hledt, Purina Feeds	Jon Albro, Ridly (Hubbard Feeds)	Matt Moore, Cargill
Wyoming Farm Bureau	Wyoming Vocational Agricultural Teachers Association	

Revisions in Curriculum Since Last Review:

There have been major revisions in curriculum since the last program review. The first change was the creation of a one-year certificate in Beef Production. Of all of the one-year certificate possibilities, this seemed the most logical to begin with given our faculty and current resources. With the retirement of a long-time Ag faculty member, the college administration undertook a huge community assessment of the Agriculture program. This consisted of a number of small focus groups that answered questions and made recommendations about the program. The results of the surveys and group discussions were compiled into a multi-page document that was addressed the following year by bi-monthly meetings of the Ag faculty members. As a result of this input there was a major revision in the Agriculture curriculum. Rather than having several separate transfer A.S. majors, we combined all Ag related majors into one umbrella called an Associate of Science degree in Agri Business and Sciences. Within this major students have four options that will determine the approved electives that students will take: General Agriculture, Agricultural Business, Agroecology/Agronomy, and Animal Science.

Part II Narrative Analysis

Description of Community Need

The Eastern Wyoming College service area consists of the top agriculture production in the State of Wyoming, leading the state in almost every category of livestock and crop production. The agriculture sector in the United States has more job opportunities in production agriculture and agri-business than current agricultural graduates to fill these positions. Food production will need to double in the next 30 to 40 years to meet the food and fiber needs of a growing population that will reach 9 billion by 2050. Rural communities, farms, and ranches will be dependent on a workforce that will have skills in machinery maintenance, welding, crop production, range management, and livestock husbandry/production, plus life skills in communications, time management, decision-making, and leadership.

Description of State and National Trends

United States	Employment		Percent Change	Job Openings
	2006	2016		
Agricultural Workers	409,590	433,890	5.9	24,300
Wyoming	Employment		Percent Change	Job Openings
	2006	2016		
Agricultural Workers	539	677	25.6	27

Other information or comments that would assist the Curriculum and Learning Council: Note: the data for the State Employment Trends and the National Employment Trends are not directly comparable. The projection period for state data is from 2004-2014, while the projection for national data is from 2006-2016. Job Opening refers to the average annual Job openings due to growth and net replacement. Further, it is impossible to list all of the various agricultural careers that students are entering either upon graduation from EWC or eventually upon graduation from a transfer institution. For example banking and finance, agri-business, or entrepreneurial ventures would all indicate higher than average annual wages. For purposes of this report, the general category of Agricultural Workers was used.

State and National Wages (from 2004 through 2014)

Location	Pay Period	Year or Period				
		10%	25%	Median	75%	90%
United States	Hourly	8.23	8.66	9.36	12.98	18.63
	Yearly	17,118	18,013	19,469	26,998	38,750
Wyoming	Hourly	NA	NA	15.03	NA	NA
	Yearly	NA	NA	31,262	NA	NA

Other information or comments that would assist the Commission: Information on this chart was from Wyoming Employment Projections http://doe.state.wy.us/lmi/proj2005/long_occ2014.htm. Wage data are collected by each state through the Occupational Employment Statistics (OES) survey, conducted by the Bureau of Labor Statistics (BLS) at the U.S. Department of Labor. National wage estimates are developed by BLS. State and national occupation information is classified using the Standard Occupation Classification (SOC) system.

Activities in Support of Student Recruitment and Retention:

Strong advising activities are provided by the Agricultural faculty. Students are placed in classes according to their ability and in line with Compass guidelines. The Block & Bridle organization provides extracurricular activities that tend to create cohorts of Ag students. In the area of recruiting, faculty members visit local High Schools, attend the state-wide High School Ag Teachers meetings, and contact potential students via mail and phone. The Ag faculty host the annual Ag/Rodeo awards banquet each year where top students and graduating students are recognized. Ag faculty also host an Ag Day where prospective students are invited on campus for information and tours, and then given free tickets to attend the EWC college rodeo. Ag faculty create activities during Technology Day to provide prospective students a hands-on exposure to areas that they will be studying when they attend college. The Livestock Judging coach and team members assist in area 4-H and FFA livestock judging contests by acting as reasons takers and official judges.

Assessment of Student Learning

The Program assessment tool for AAS students is the capstone course where students develop a business plan utilizing the course material that they have covered during their program at EWC. These business plans display much thought, insight, and practical applications of the course material that the students have taken. The Program assessment tool for AS students is the capstone course where students develop an in-depth research paper in an area of the student's interest. The completed paper is also presented orally to the instructor and fellow class members. Students have exhibited excellent research and presentation skills in creating their research papers. Students were previously evaluated using the Perkins Post Secondary Evaluation Rubrics, but that assessment tool is no longer used in the program. The Beef Production Certificate program uses an exit interview conducted by members of the Ag faculty.

Several years ago we made substantial changes in the AAS Farm/Ranch program as per recommendation of the Advisory Committee by including more transfer level classes in the general education area. The result has been that fewer classes have been cancelled because of low enrollment and students have performed well in these classes. When students have decided to pursue a transfer program rather than an AAS program, we have found that they face fewer problems in the transition. Annually the University of Wyoming reports how EWC students that transferred there are performing. We routinely find that our transfers are doing as well as or better than other community college transfers and students that began their education at the University. We also have found that most students that have graduated from EWC in Agriculture areas have found jobs in or in similar areas where they wanted to work. In summarizing all of these assessment tools, we have found that students in general have been able to utilize their education to do well in our assessments and when they leave EWC, either to further their education or to go out into the job market.

Strengths of the Program and Faculty:

Even though we do not currently have dedicated facilities for classes, instructors have been able to improvise and utilize local resources in order to provide students with hands-on lab experiences where students have the opportunity to apply the things discussed in class. Despite the lack of "showroom" facilities, a strong faculty and program have still proven a good draw to bring students to EWC. The program has an advisory committee that meets at least once a year to review curriculum and make suggestions about the programs. Our faculty members have strong backgrounds and, in some cases, faculty are currently involved in agriculture production and students benefit from this experience. Faculty work closely with students in order to ensure they receive the best quality education. We have low student to faculty ratios so that faculty get to know their students very well.

EWC has made progress in working with the University of Wyoming at the SAREC facility and will continue to develop relations to mutually benefit both institutions. Two meetings were held this past spring semester between UW department heads, UW instructors, and EWC administration and instructors. Exciting possibilities were discussed, and we will continue to

work on these. We are in the process of beginning the construction of a Livestock barn and revamping some of our current facilities in order to overcome the lack of facilities. This year for the first time EWC actually had some of its own animals that could be used in livestock evaluation classes. During the community assessment team evaluations, the EWC Agriculture program in general received positive feedback and many ideas that we have begun incorporate into the program. Community support was very evident in the small community group meetings. Ag faculty have begun an effort to attend more Wyoming FFA functions and meetings, and this has already begun to bring results to the program. We now have a complete faculty with the hiring of a new Ag instructor and we are excited about what we can offer our students in the coming years. The “Sagebrush and Roses” dinner/dance that raises funds for our Ag and Livestock Judging programs continues to grow and has become one of the most outstanding and most anticipated community events that we have in Goshen County.

Part III Recommendations

Faculty Recommendations

We have made some major changes in our Ag program as a result of community surveys and advisory committee input. It is imperative that we closely follow and assess what effect these changes are going to have on student learning, performance, and graduation rates. We have already noticed this year that there was a significant increase in the number of Ag related graduates. We will continue to explore educational approaches in the classroom that will improve student engagement and student learning. It is critical that we continue moving forward with the major facilities planned for the Ag program. As our facility program continues, we will need to step up our recruiting efforts and intensify our efforts to be more involved in Ag community activities. We also want to continue exploring additional program possibilities as our facilities materialize. An alumni list or contact program needs to be created and utilized for marketing purposes.

Advisory Committee Recommendations

For many years the Ag Advisory committee has recommended the construction of Ag facilities to support the program. They are very excited with the progress we have made so far and are in full support of moving on with the planned facilities. They have been supportive of the academic program changes that we have made and look forward to how these changes will impact the EWC program. They continue to recommend more involvement and contact with every possible Ag related activity in the community and state, especially 4-H and FFA youth activities.

Division Chair Recommendations

There have been exciting changes taking place in the Ag area since the last program review. We have launched a successful Livestock Judging team that has done relatively well in regional and national contests and has provided participating students with competition skills and personal skills in evaluating and communicating that will enrich the rest of their lives. We have begun a

facility program that will greatly enhance the program by providing more potential student learning experiences and more potential benefits to the community. We have hired a new faculty member that we feel will fit into our philosophy and will provide excellent student learning opportunities for years to come. We have strengthened our local ties with SAREC, the UW Extension service, and local producers. We have begun participating in more statewide meetings with FFA Ag instructors/advisors. These activities are bound to result in more recognition and more EWC student recruitment. Specific recommendations are as follows:

- Continue the facility construction plans as quickly as finances will allow.
- Continue close involvement with local Ag entities such as SAREC, Extension, and organizations.
- Continue involvement with FFA and 4-H activities, state meetings, and contests.
- Mentor the new Ag instructor so that she will be a productive part of the Ag faculty.
- Continue the monthly meetings with Ag instructors so that planning, implementation, and creation of goals and objectives may continue.
- Continue statewide articulation meetings with UW and Wyoming Community College instructors so that we can be aware of what is happening in other institutions.
- Address the outcomes assessment process for any improvement and changes that might better reflect student learning and possibilities for more appropriate techniques.
- Continue working closely with the Vet Tech faculty so that full use of resources can happen by using them in both programs.
- Continue exploring other possible additions to the Ag program such as a working farm/ranch that could be utilized by EWC Ag students to better prepare them for the real world they will be facing when they leave EWC.
- Continue the exploration of other certificate or degree programs that might be developed in the Ag area to meet the demands of the working world.

Vice President's Recommendations

The agricultural programs have seen exciting and needed programmatic changes in the last two years. These changes were based upon focus group input, research from the faculty members, and advisory council ideas. In addition, I've observed a synergistic effect as the conversation and

ideas have spawned further new initiatives including building facilities to include the high tunnel greenhouses, a livestock barn, and the Agricultural Technology Education Center. Student recruitment efforts have increased, and the faculty members have hosted an Ag Day in the spring and participation in Technology Day in the fall. I applaud the efforts of the faculty and division chair as they have continued to meet over the last two years to ensure continued progress in all areas. I concur with the recommendations from the Division Chair and add the following:

1. Continue to study retention and graduation rates and explore ways to further improve them. The curriculum changes alone have increased the graduation rate within just one year.
2. Monitor curricular changes to ensure ease of transfer and completion of programs by students.
3. Hold at least two advisory council meetings each year. This group has the most active and well-represented advisory council of any of our programs at the College. These members are advocates and resources for the programs.
4. Continue to build and support the Livestock Judging Team to help further enhance a competitive edge and recruiting results.
5. Participate in public awareness and fundraising as appropriate to help our new Agricultural Technology Education Center become a reality.
6. Work closely with Veterinary Technology and Welding and Joining program faculty to support curriculum offerings and options for students.
7. Research and recommend other courses or program options such as agricultural mechanics.