Black Hawk College

Detailed Assessment Report
2009-2010 Agribusiness Management 9142, AAS Production Tecnology 9141 AAS
As of: 9/17/2013 01:04 PM CENTRAL

Analysis Questions and Analysis Answers

Answer only those questions that apply.
(ALL) What specifically did your assessments show regarding proven strengths or progress you made on outcome?

The Applied Science Department continues to develop more assessment tools and evaluate the results. We feel that course content is meeting the needs of students and the various programs. High student retention and program completion serve as indicators of realizing outcomes goals.

(All) What specifically did your assessments show regarding any outcomes that will require continued attention?

Assessment of students in the program areas of Agbusiness Management and Agriculture Production Management need to improve basic communications skills such as public speaking, resume writing, and general writing.

(Student Learning-Course) What changes did you make, or plan to make, based on these results?
More emphasis will be placed on developing and improving communications skills in seminar classes, COMM 100, as well as their other program classes. Students will be encouraged to participate in educational and skill development opportunities available through participation in PAS and NACTA career development events.

(Student Learning-Course) Describe how this assessment influenced how faculty in this area teach AND your students' learning.

Some faculty are making changes in course delivery and in their assessment tools which will promote improved communications skills. Students are required to develop a portfolio which contains their resume, a letter of application, and a powerpoint presentation of their work experience programs. After completion of their second work experience, students present their portfolios to faculty for evaluation/feedback as well as give an oral presentation of their work experiences using the powerpoints they developed.

(PR) STUDENT/MARKET NEED: (CTE) Describe the current and future occupational demand for the program. Include Advisory Committee feedback on demand for skills and an analysis of student enrollment trends and projections.
The Applied Science Advisor Committee provides valuable feedback on their employment needs as well as skill sets required and desired. The department incorporates this information into specific course content. The USDA projects that through 2005 – 2010 there will be 52,030 employment opportunities annually for college graduates in the US food, agricultural, and natural resource system. Agricultural and natural resource graduates will number 32,325 annually. Employers will be forced to hire individuals from allied programs, but in most cases will prefer to hire applications with agricultural and natural resource degrees. In Illinois, approximately 33% of employment is in agriculture and agriculture related areas. Recruitment of our graduating students continues at the local, state, and national levels.

Connected Documents
- Agri-Business Management Student Demographics
- Labor Market-Agribusiness Management 9142: Agricultural Sciences Teachers, Postsecondary
- Labor Market-Agribusiness Management 9142: Aquacultural Managers
- Labor Market-Agribusiness Management 9142: Crop and Livestock Managers
- Labor Market-Agribusiness Management 9142: Farmers and Ranchers
- Labor Market-Agribusiness Management 9142: Nursery and Greenhouse Managers
- Occupational Report: Agri Business Management 9142

(PR) STUDENT/MARKET NEED: (Discipline) Are the course offerings appropriate to meet the needs of students who will transfer and/or support general education requirements?
Black Hawk College is a participant in the Illinois Articulation Initiative (IAI). All of the courses in the Agriculture Transfer Program have IAI designation. Currently, Black Hawk College is a voting member of the IAI Agriculture Panel. Transfer courses are articulated with universities in Illinois and out-of-state universities such as Iowa State University, Purdue University, Kansas State University, Texas A & M University, and Oklahoma State University.

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- Occupational Report: Agri Business Management 9142

(PR) HUMAN RESOURCE REVIEW: Describe the Programs/Discipline capacity and capability needs including skills, competencies and faculty staffing levels to meet student needs and/or employer's needs.
The Applied Science Department has 11 full-time faculty members. Faculty meet the College's competency requirements for the subject matter in which they have teaching assignments. Additionally, faculty have met the ICCB's requirement of work experience hours in industry. Faculty are specialized in Agbusiness Management, Agronomy, Animal Science, Agricultural Economics, Equestrian Science, Horticulture, Agriculture Education, Automotive Mechanics Technology and Agricultural Mechanics Technology, General Agriculture, and Agricultural Information Technologies.

Connected Document
- Agri-Business Management Course Capacity Data

(PR) STUDENT OUTCOMES, ACHIEVEMENT, PLACEMENT, FOLLOW-UP: What measures of student learning and

development does the Program/Discipline collect and analyze regularly? What are the findings from this analysis? What improvements have been made as a result of these findings?

Faculty members collect results from assessment tools used in classes and in program areas. This data is submitted to the Student Assessment Committee and to the Director of Student Assessment. The results are summarized and published annually. Faculty review this document and also review their individual assessment results. Hopefully, instructional improvements result from this evaluation.

Connected Document

Agri-Business Management Grade Distribution Data

(PR) STUDENT OUTCOMES, ACHIEVEMENT, PLACEMENT AND FOLLOW-UP: Describe the evidence that the students completing programs/degrees/certificates/courses have acquired the knowledge and skills required by employers or transfer institutions?

Surveys of graduates provides feedback on the knowledge and skill sets they obtained and if those meet the needs of employers. Additionally, employers are surveyed during student's work experience programs. These surveys help direct what knowledge and skill sets need to be incorporated into specific courses and program areas. Recommendations from the Advisory Committee on knowledge and skill sets for various employment areas are also incorporated into programs.

Connected Document

Agri-Business Management Clearinghouse Data

(PR) STUDENT OUTCOMES, ACHIEVEMENT PLACEMENT, AND FOLLOW-UP: Of the _____ ICCB Generic course syllabi in this program area, ____ meet all course syllabi elements as established by the ICCB Program Manual and outlined in the Faculty Handbook. List those Generic course syllabi and describe the approach the department will use to ensure those not meeting all the Generic Course syllabi elements will be updated within the coming academic year. Faculty course level and Distance Learning Course Syllabus review is not included in this process.

The department is currently reviewing the master syllabi for each program area. Syllabi revisions are being submitted to the Curriculum Committee for acknowledgement or acceptance. The syllabi for crops and soils courses have been reviewed and acknowledged. Syllabi for agriculture economics and several agbusiness management courses have also cleared the acknowledgement process. The remaining programs will have completed the review process during academic year 2011.

(PR) CURRICULUM/INSTRUCTIONAL APPROACHES: (CTE) Is the level of the curriculum appropriate to the credential?

Based on input from the Advisory Committee, employers of student interns, and employers of graduates, the curriculum is appropriate to the credential. Some suggestions for curriculum enhancement from these stake holders includes, more computer skill training, more instruction in technology, more coverage of environmental topics, and current policy issues.

(PR) CURRICULUM/INSTRUCTIONAL APPROACHES: (Discipline) Describe the transfer requirements or content that may be imposed on the program during the next five years and the department's plans to address those changes.

The Agbusiness Management and Agriculture Production Technology programs are not transfer oriented programs. However, students do have the option of transferring to a four year institution. Illinois State University, Western Illinois University, and the University of Wisconsin – Platteville, will transfer in students with the AAS Degree. The majority of courses will transfer and meet introductory core requirements and electives. Credit for work experience does not transfer. Southern Illinois University – Carbondale offers the Capstone Program to AAS Degree students. They will transfer all courses and allow students to earn a bachelorette degree with two additional years of study.

Connected Documents

Agri-Business Management Courses Tied to Program
AGRICULTURE COURSE DESCRIPTIONS

(PR) CURRICULUM/INSTRUCTIONAL APPROACHES: Describe how the program structure, schedule, curriculum, and modes of delivery are designed to effectively achieve student learning objectives and/or student needs?

Associate of Applied Science Degree programs require students to complete one or two work experiences. These work experiences give students the opportunity learn while employed as well as prepare them for employment upon program completion. These work experiences are structured to enable students to work during spring, summer, and fall, thus gaining experience during the entire crop production cycle and for industries providing crop inputs and crop marketing and processing. Classroom instruction provides students with lecture and laboratory experiences. The emphasis is on the application of theories to problem solving and management. Instructional delivery involves a mix of traditional classroom lecture/discussion, laboratories, hybrid delivery, and online delivery. In the Spring of 2009 a four day schedule was introduced. Student response was positive so the four day schedule continues.

Connected Documents

ADVISING CHECKLIST
Agri-Business Management 9142, AGRICULTURE CURRICULUM
FACT SHEET Agri Business Management

Detailed Assessment Report

2009-2010 Agribusiness Management 9142-AAS Production Technology 9141

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Connected Documents

Agribus Mgt Crop Protect Tech Option-Demographics
Labor Market 9143-Agribusiness -Crop Protection Tech Option: Supervisors Mangers of Agricultural Crop & Horticultural Workers
Labor Market 9143-Agribusiness Management-Crop Protection Tech Option: Agricultural Sciences Teachers, Postsecondary
Labor Market 9143-Agribusiness Management-Crop Protection Tech Option: Agricultural Technicians
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Labor Market 9143-Agribusiness Management-Crop Protection Tech Option: Crop and Livestock Managers
Labor Market 9143-Agribusiness Management-Crop Protection Tech Option: Farm and Home Management Advisors
Labor Market 9143-Agribusiness Management-Crop Protection Tech Option: Farmers and Ranchers
Labor Market 9143-Agribusiness Management-Crop Protection Tech Option: Farmworkers and Laborers, Crop
Labor Market 9143-Agribusiness Management-Crop Protection Tech Option: Food Science Technicians Occupational Report

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Course Capacity Data: Agribus Mgt. Crop Protect Tech Option

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Agribusiness Management-Crop Protection Tech Option 9143: Clearinghouse Data

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Agribus Mgt Crop Protect Tech Option-Courses Tied to Program
Program Course Descriptions

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Prefix	Number	Course Master File.Title	PCS	CIP	PreK2000	Curriculum Prefix	Curriculum Number	Curriculum Master File.Title	Curriculum Master File.Status	Course Master File.Status	Begin Date	End Date	Fund Level
AG	020	MARKET MASTER	16	010101	010101	VOCSK	1601	VOC SKILLS IN AGRI OCC	A	A	5/1/1994		3
AG	125	COMPUTERS IN AGRICULTURE	12	010101	010101	02	9141	AGICULTURE PRODUCTION TECHNOLOGY	A	A	5/1/1994		3
AG	289	MICROCOMPUTER SKILLS FOR AGRI	12	010101	010101	01	1519	AGRICULTURE TRANSFER	A	A	5/1/1994		3
AG	025	COMPUTER COOR. FINANCIAL STMTS	16	010101	010101	02	5041	AGICULTURE PRODUCTION TECHNOLOGY	W	A	5/1/1994		3
AG	222	AGRICULTURAL MARKETING	12	010101	010101	02	5042	AGRI-BUSINESS MANAGEMENT	W	A	5/1/1994		3
AG	224	AG LAW	12	010101	010101	02	5042	AGRI-BUSINESS MANAGEMENT	W	A	5/1/1994		3
AG	225	COMPUTER APPLICATIONS IN AGRI	12	010101	010101	02	5042	AGRI-BUSINESS MANAGEMENT	W	A	5/1/1994		3
AG	226	INTRO TO COOR FINANCIAL STMTS	12	010101	010101	02	5041	AGICULTURE PRODUCTION TECHNOLOGY	W	A	5/1/1994		3

Program: Agri-Business Management
Prefix and Number Used: 02 9142
CIP Code(s): 010101
Year of Review: FY2010

		FY2005	FY2006	FY2007	FY2008	FY2009
Total Number of Students:		18	18	21	27	26
Category						
Gender	Male	14	13	15	19	20
	Female	4	5	6	8	6
Ethnicity	Caucasian	17	18	20	26	24
	Asian	0	0	0	1	0
	Native American	0	0	0	0	0
	African American	0	0	0	0	0
	Hispanic	1	0	1	0	0
	Other/Unknown	0	0	0	0	2
	Total Minority	1	0	1	1	2
Age	Under 25	17	17	20	26	24
	25 and Over	1	1	1	1	2
	Unknown	0	0	0	0	0
Previous Education	< High School	1	1	1	0	0
	High School or GED	17	16	19	22	23
	Some College	0	0	1	5	3
	Certificate/Associate's	0	0	0	0	0
	>=Bachelor's	0	0	0	0	0
	Unknown	0	1	0	0	0
Student Level	Freshman	2	4	3	8	6
	Sophomore	16	14	17	19	20
	High School	0	0	0	0	0
	Other	0	0	1	0	0
Current Goal	Transfer	5	4	6	5	9
	Improve job skills	0	0	0	2	2
	Career prep	10	10	13	19	14
	Basic skills	0	0	0	0	0
	Personal Interest	0	0	0	0	0
	Other	3	4	2	1	1
Objective	Courses only	1	0	0	1	0
	Earn Certificate	1	2	1	2	4
	Earn Degree	16	16	20	24	22
Status	Full-time	16	15	18	26	23
	Part-time	2	3	3	1	3

Program: Agri-Business Management
Prefix and Number Used: 02 9142
CIP Code(s): 010101
Year of Review: FY2010

Disadvantage Status	Economic Disadvantage	0	5	8	7	6
	Academic Disadvantage	3	3	0	2	2
	Both	1	0	0	2	1
	None	14	10	13	16	17
Student Completers	Yes	11	2	6	8	10
	No	7	16	15	19	16
Number of Degrees Awarded		12	7	7	5	7

Curriculum Review Data
Department Code(s):

Full-time Faculty
Part-time Faculty

Equated Hours
Head Count
Total Credits
Credit Hours/Equated Hours

Revenue
Cost
Ratio

Total Cost per FTE

Department Costs

Black Hawk College – Academic Planning Chart

Agribusiness Management
Associate in Applied Science Degree 9142

Name: _____ Date: _____

General Education Courses
Electives
❑ Communications (3 hrs.)
❑ AG Electives (11 hrs.)
❑ Mathematics (3 hrs.)

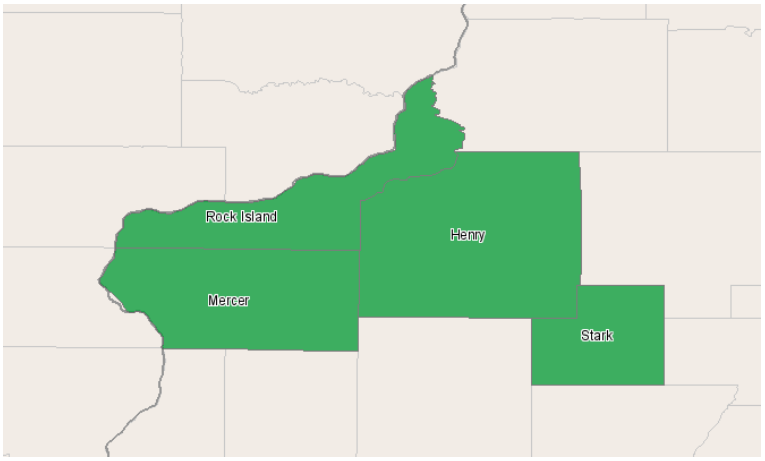
Program Requirements			
Courses		**Semester taken**	**Grade**
❑ AG 101 – Introductory Ag Seminar	1	_____	_____
❑ AG 102 – Ag Work Experience Seminar	1	_____	_____
❑ AG 107 – Agribusiness Work Experience	7	_____	_____
❑ AG 121 – Ag Economics	3	_____	_____
❑ AG 122 – Farm Management	4	_____	_____
❑ AG 125 – Computers in Agriculture	1	_____	_____
❑ AG 131 – Soils and Soil Fertility	4	_____	_____
❑ AG 132 – Field Crop Science	1.5	_____	_____
❑ AG 133 – Field Crop Science 2	2	_____	_____
❑ AG 134 – Field Crop Science 3	.5	_____	_____
❑ AG 135 – Ag Chemicals I	1.5	_____	_____
❑ AG 136 – Ag Chemicals 2	1	_____	_____
❑ AG 137 – Ag Chemicals 3	.5	_____	_____
❑ AG 141 – Animal Science	4	_____	_____
❑ AG 171 – Ag Materials Handling Equipment	2	_____	_____
❑ AG 201 – Advanced Agricultural Work Experience Seminar	1	_____	_____
❑ AG 202 – Advanced Ag Seminar	1	_____	_____
❑ AG 207 – Advanced Agribusiness Work Experience	5	_____	_____
❑ AG 211 – Ag Salesmanship	3	_____	_____
❑ AG 222 – Agricultural Marketing	4	_____	_____
❑ AG 223 – Agricultural Marketing	3	_____	_____
❑ AG 225 – Computer Applications in Ag	3	_____	_____

NOTE: A minimum of eleven elective hours are required in the Agribusiness Management Program. Suggested electives include: (Fall Semester) AG 138, 142, 148, 214, 238, 244, 248, 272 and 275 (Spring Semester) 147, 149, 232, 241, 242, 245, 246, 247, 249, and 276.

Black Hawk College

6600 34th Avenue
Moline, Illinois 61265
309.852.5671

Occupation Report



Region Info

Region: Black Hawk College

Description: The four largest counties in Black Hawk College's District

County Areas: Henry, Illinois (17073), Mercer, Illinois (17131), Rock Island, Illinois (17161), Stark, Illinois (17175)

Executive Summary

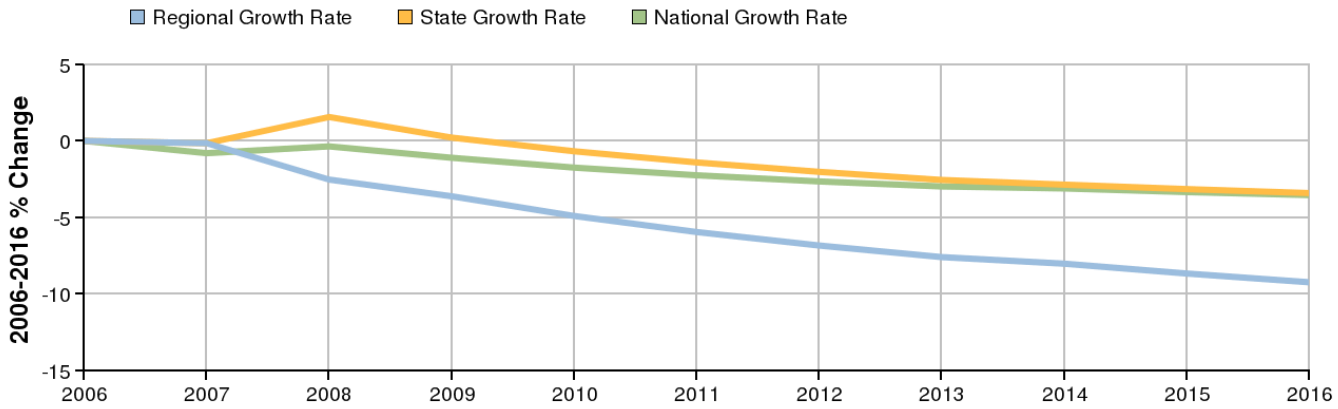
Selected Occupations	Education Level
Farm, ranch, and other agricultural managers (SOC 11-9011)	Degree plus work experience
Farmers and ranchers (SOC 11-9012)	Long-term on-the-job training

Basic Information	
2006 Occupational Jobs	3,198
2016 Occupational Jobs	2,903
Total Change	-295
Total % Change	-9.25%
Current Median Hourly Earnings	$8.20

Economic Indicators	
2006 Location Quotient	2
2016 Location Quotient	1.96
Shift Share: Regional Competitiveness Effect	-177
Shift Share: Occupational Mix Effect	-401
Shift Share: National Effect	282

Source: EMSI Complete Employment - 3rd Quarter 2009

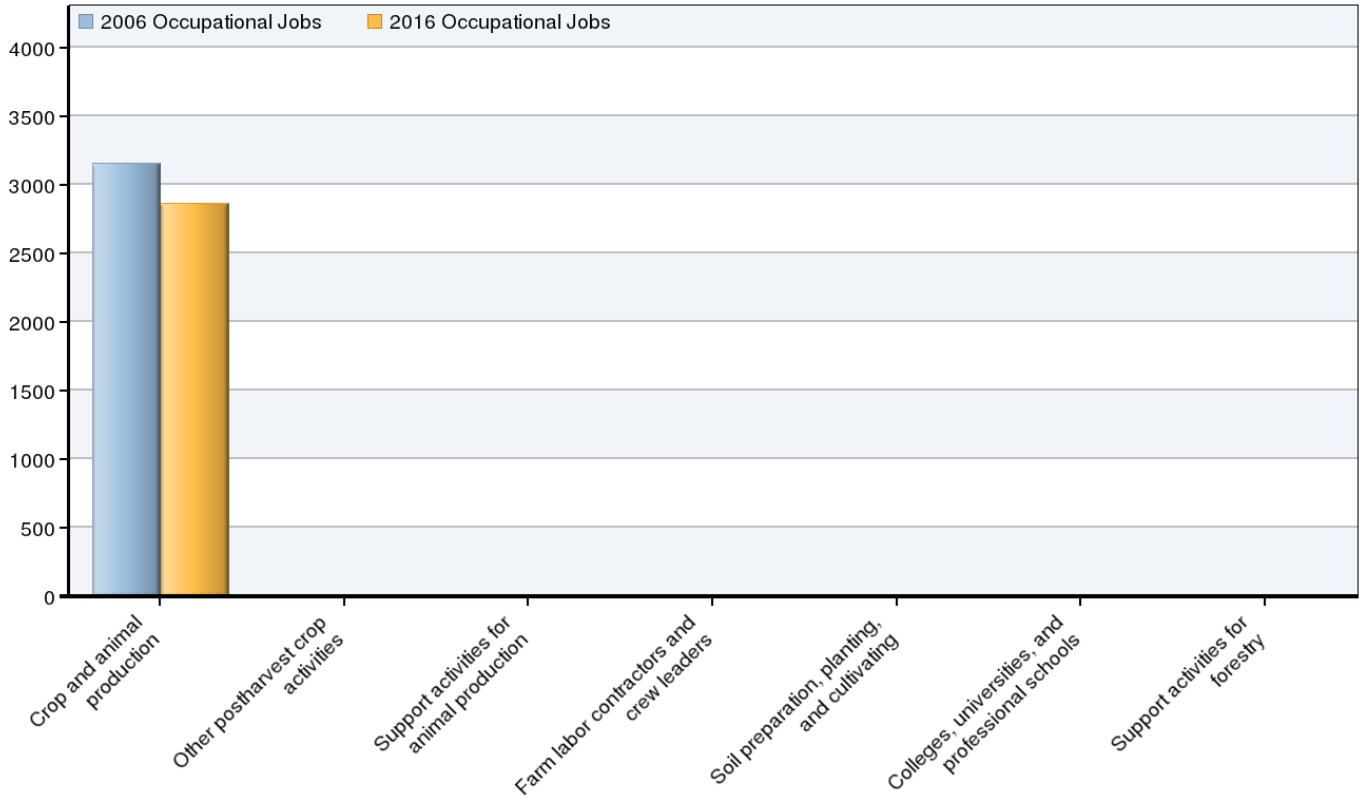
Occupational Change Summary



Region	2006 Jobs	2016 Jobs	Change	% Change	Current Median Hourly Earnings
Regional Total	3,198	2,903	-295	-9%	$8.20
State Total	75,673	73,093	-2,580	-3%	$8.35
National Total	2,244,645	2,165,233	-79,412	-4%	$8.92

Source: EMSI Complete Employment - 3rd Quarter 2009

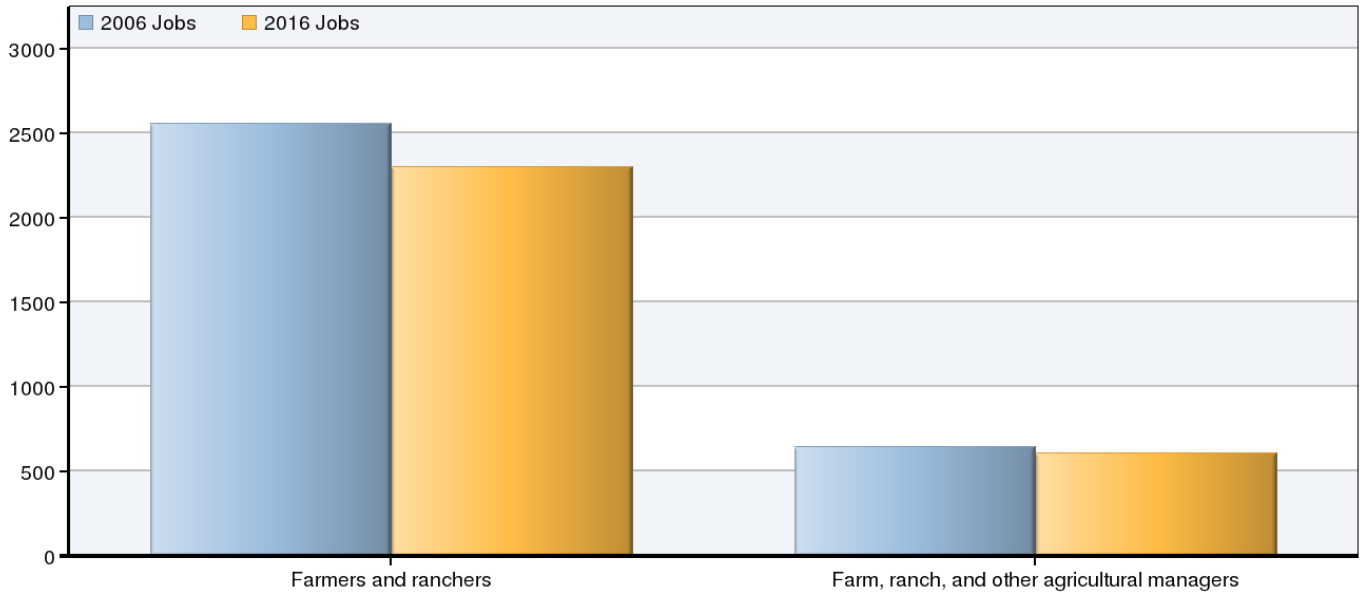
Top Industries for Selected Occupations



NAICS Code	Name	2006 Jobs	2016 Jobs	Change	% Change
11A000	Crop and animal production	3,152	2,861	-291	-9%
115114	Other postharvest crop activities	11	10	-1	-9%
115210	Support activities for animal production	<10	<10	--	--
115115	Farm labor contractors and crew leaders	<10	<10	--	--
115112	Soil preparation, planting, and cultivating	<10	<10	--	--
611310	Colleges, universities, and professional schools	<10	<10	--	--
115310	Support activities for forestry	<10	<10	--	--

Source: EMSI Complete Employment - 3rd Quarter 2009

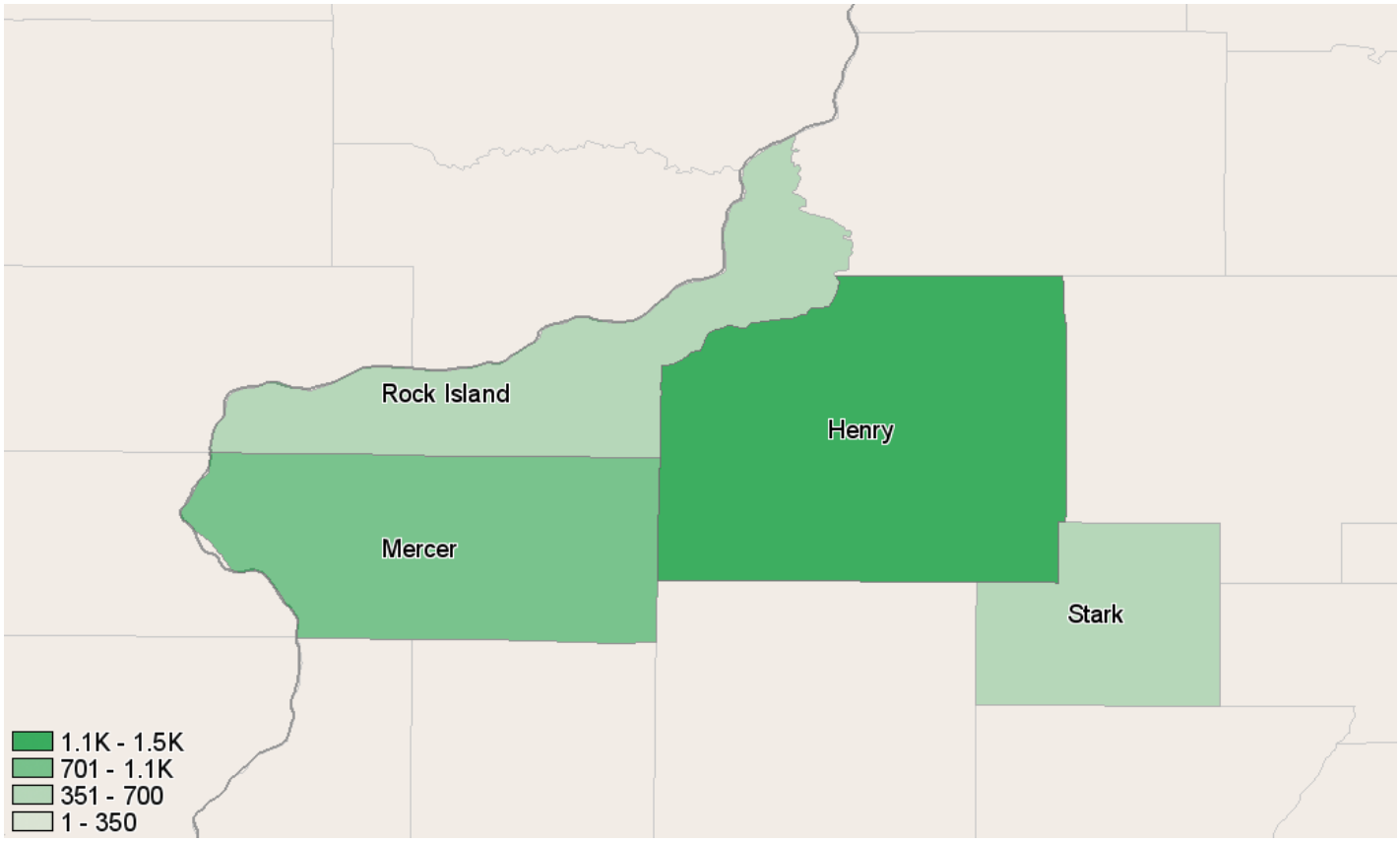
Occupational Breakdown



SOC Code	Description	2006 Jobs	2016 Jobs	Current Median Hourly Earnings
11-9012	Farmers and ranchers	2,554	2,298	$8.01
11-9011	Farm, ranch, and other agricultural managers	645	605	$8.94
	Total	**3,198**	**2,903**	**$8.20**

Source: EMSI Complete Employment - 3rd Quarter 2009

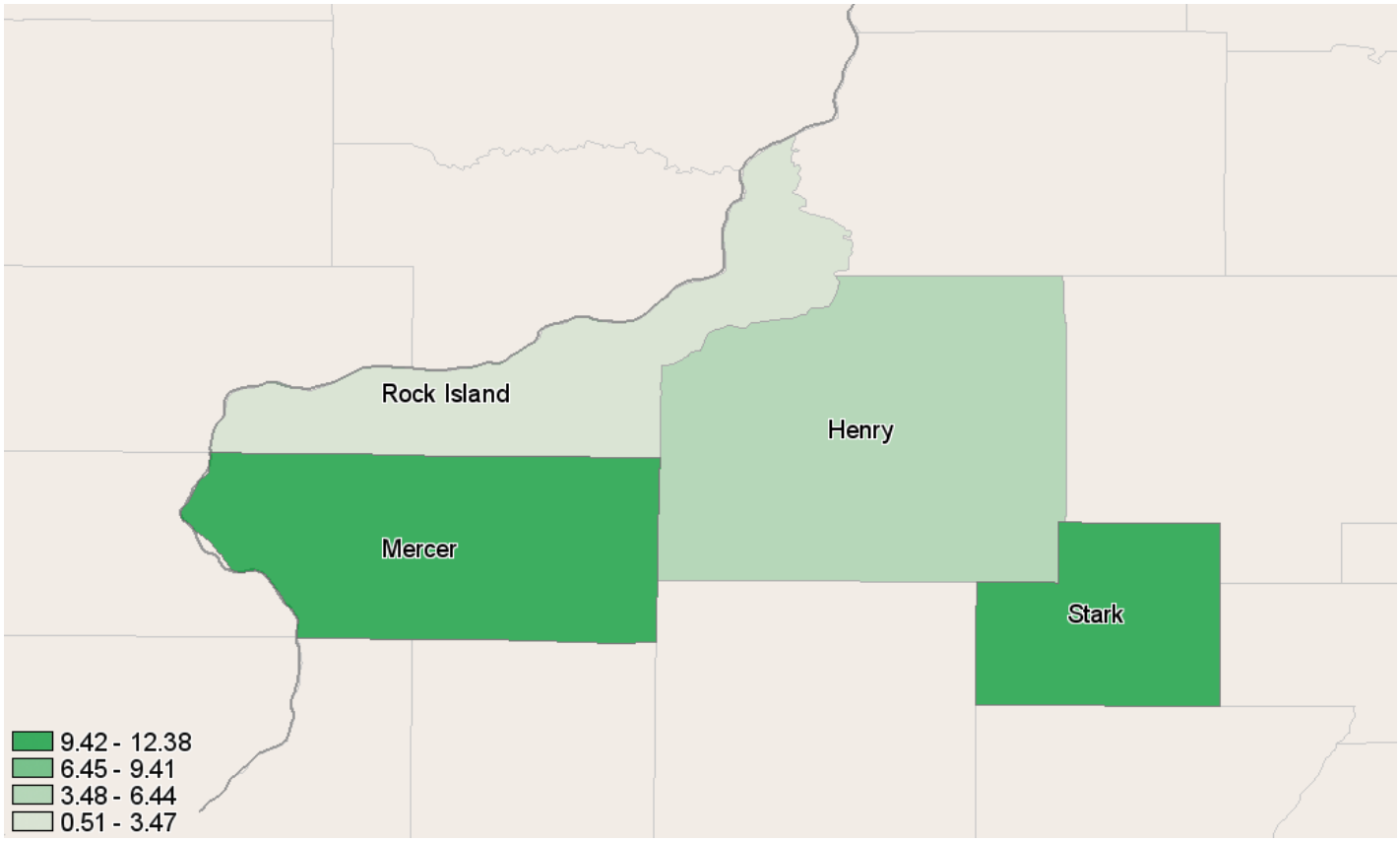
Occupation Distribution



County	2006 Jobs
Henry, IL (17073)	1,406
Mercer, IL (17131)	809
Rock Island, IL (17161)	607
Stark, IL (17175)	377

Source: EMSI Complete Employment - 3rd Quarter 2009

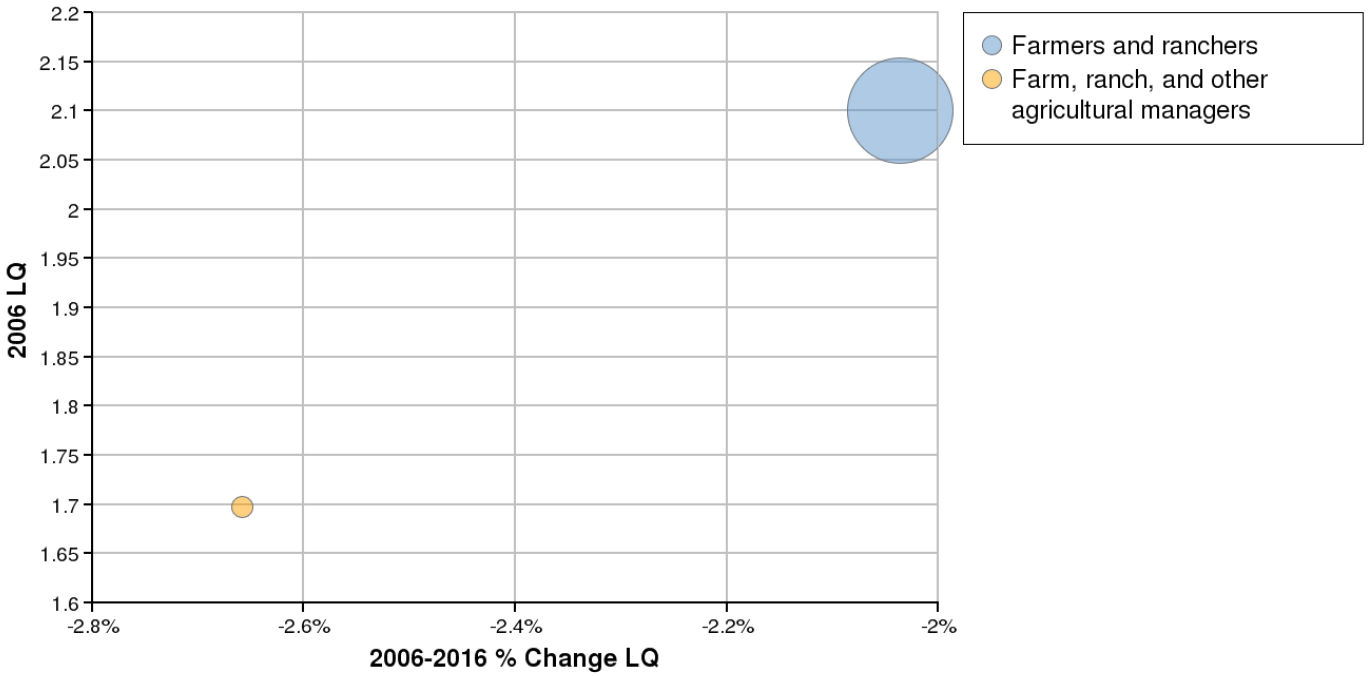
Occupation Concentration



County	2006 Location Quotient
Stark, IL (17175)	12.36
Mercer, IL (17131)	10.80
Henry, IL (17073)	4.87
Rock Island, IL (17161)	0.51

Source: EMSI Complete Employment - 3rd Quarter 2009

Location Quotient Breakdown

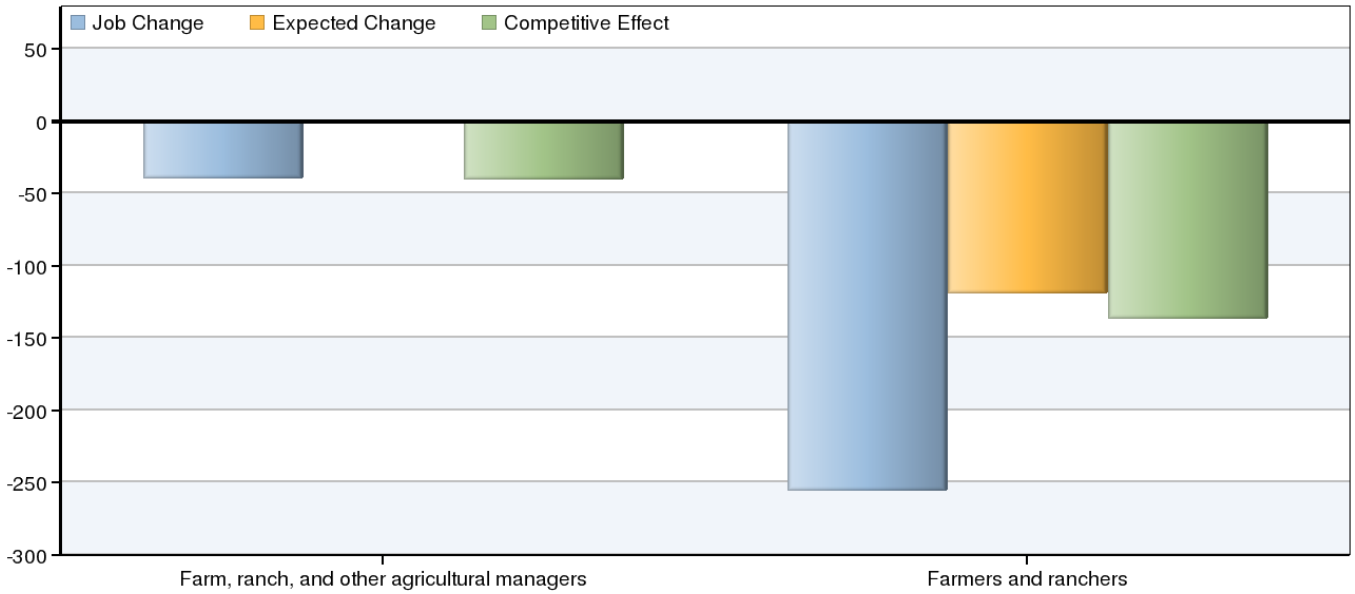


*Bubble size represents 2006 jobs in each occupation.

SOC Code	Description	2006 Jobs	2006 LQ	2016 LQ
11-9011	Farm, ranch, and other agricultural managers	645	1.70	1.65
11-9012	Farmers and ranchers	2,554	2.10	2.06
	Total	**3,198**	**2**	**1.96**

Source: EMSI Complete Employment - 3rd Quarter 2009

Shift Share Breakdown



SOC Code	Description	Job Change	Occ Mix Effect	Nat Growth Effect	Expected Change	Competitive Effect
11-9011	Farm, ranch, and other agricultural managers	-40	-56	57	0	-40
11-9012	Farmers and ranchers	-256	-345	225	-119	-137
	Total	**-296**	**-401**	**282**	**-119**	**-177**

Source: EMSI Complete Employment - 3rd Quarter 2009

Data Sources and Calculations

Industry Data

In order to capture a complete picture of industry employment, EMSI basically combines covered employment data from Quarterly Census of Employment and Wages (QCEW) produced by the Department of Labor with total employment data in Regional Economic Information System (REIS) published by the Bureau of Economic Analysis (BEA), augmented with County Business Patterns (CBP) and Nonemployer Statistics (NES) published by the U.S. Census Bureau. Projections are based on the latest available EMSI industry data, 15-year past local trends in each industry, growth rates in statewide and (where available) sub-state area industry projections published by individual state agencies, and (in part) growth rates in national projections from the Bureau of Labor Statistics.

Occupation Data

Organizing regional employment information by occupation provides a workforce-oriented view of the regional economy. EMSI's occupation data are based on EMSI's industry data and regional staffing patterns taken from the Occupational Employment Statistics program (U.S. Bureau of Labor Statistics). Wage information is partially derived from the American Community Survey. The occupation-to-program (SOC-to-CIP) crosswalk is based on one from the U.S. Department of Education, with customizations by EMSI.

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Shift Share

Shift share is a standard regional analysis method that attempts to determine how much of regional job growth can be attributed to national trends and how much is due to unique regional factors.

State Data Sources

This report uses state data from the following agencies: Illinois Department of Employment Security, Employment Projections.

Occupational Program: Agri-Business Management
Black Hawk College's Prefix and Number: 02 9142
Year of Review: FY2010

	Fiscal Year the Student is Enrolled In at BHC				
	FY2005	**FY2006**	**FY2007**	**FY2008**	**FY2009**
Students with a major of Agri-Business Management:	18	18	21	27	26
Number transferring to another institution the next fiscal year:	7	7			
Most Frequent Institution Transferred To:	No duplicates	WIU			
Number that graduated from the institution they transferred to:	4	5			
Most Frequent Institution Graduated From:	WIU	WIU			
Number that earned a Agri-Business degree from the institution they transferred to:	1	1			
Most Frequently Earned Degree:	Agriculture	Agriculture			
Students Earning a Degree from Another Institution After Leaving BHC*:	1,677	1,245			
Number earning a degree from a 4-year institution:	1510	1115			
Number earning a degree from a 2-year institution:	189	135			
Number earning a Agri-Business degree from another institution:	13	11			
University of Wisconsin-Platteville:	2	4			
Illinois State University:	5	3			
Number that had a ***transfer major*** while at Black Hawk College:	8	9			
Most Frequent Transfer Major:	Ag Transfer	Ag Transfer			
Number that had an ***occupational major*** while at Black Hawk College:	5	2			
Most Frequent Occuaptional Major:	No duplicates	No duplicates			

* -- Earning a degree through the Summer of 2009

Agri-Business Management 10th Day Course Capacity Data

Campus	Course	Type	Term	Sections	Maxseats	Actualseats	%Filled
2	AG 125	T	200108	3	72	47	65.28%
2	AG 125	T	200208	3	72	52	72.22%
2	AG 125	T	200308	3	72	59	81.94%
2	AG 125	T	200408	3	72	58	80.56%
2	AG 125	T	200508	3	72	64	88.89%
2	AG 125	T	200608	3	72	60	83.33%
2	AG 125	T	200708	3	72	63	87.50%
2	AG 125	T	200808	3	72	65	90.28%
2	AG 125	T	200908	2	48	48	100.00%
2	AG 222	T	200301	1	50	17	34.00%
2	AG 222	T	200401	1	25	16	64.00%
2	AG 222	T	200501	1	25	24	96.00%
2	AG 222	T	200601	1	25	26	104.00%
2	AG 222	T	200701	1	25	19	76.00%
2	AG 222	T	200801	1	25	17	68.00%
2	AG 222	T	200901	1	25	26	104.00%
2	AG 222	T	201001	1	25	20	80.00%
2	AG 225	T	200108	2	48	12	25.00%
2	AG 225	T	200208	2	48	18	37.50%
2	AG 225	T	200301	1	25	18	72.00%
2	AG 225	T	200308	2	48	16	33.33%
2	AG 225	T	200401	1	25	15	60.00%
2	AG 225	T	200408	2	48	27	56.25%
2	AG 225	T	200501	1	25	19	76.00%
2	AG 225	T	200508	2	48	24	50.00%
2	AG 225	T	200601	1	25	10	40.00%
2	AG 225	T	200608	2	48	19	39.58%
2	AG 225	T	200701	1	25	10	40.00%
2	AG 225	T	200708	2	48	20	41.67%
2	AG 225	T	200801	1	25	22	88.00%
2	AG 225	T	200808	2	48	26	54.17%
2	AG 225	T	200901	1	25	15	60.00%
2	AG 225	T	200908	2	48	21	43.75%
2	AG 225	T	201001	1	25	14	56.00%
2	AG 289	T	200401	1	24	9	37.50%
2	AG 289	T	200501	1	24	15	62.50%
2	AG 289	T	200601	1	24	12	50.00%
2	AG 289	T	200701	1	24	22	91.67%
2	AG 289	T	200801	1	24	5	20.83%

T = Traditional Sections
W = Online Sections
S = Study Unlimited Sections

Agri-Business Management Grade Distribution Data

SUBJ	CRSE	Term	# of Sect.	# of A's	# of B's	# of C's	# of D's	# of F's	# of P's	# of W's	# of X's	A,B,C,D,F,P,W & X	A,B,C,D,F & P	Retention Rate	A,B,C & P	Success Rate
AG	125	200608	3	44	7	4	0	0	0	4	0	59	55	93.22%	55	100.00%
AG	125	200708	3	32	7	15	0	0	0	6	0	60	54	90.00%	54	100.00%
AG	125	200808	3	47	9	6	0	1	0	2	0	65	63	96.92%	62	98.41%
AG	222	200701	1	3	5	7	2	0	0	0	1	18	17	94.44%	15	88.24%
AG	222	200801	1	7	3	5	2	0	0	0	1	18	17	94.44%	15	88.24%
AG	222	200901	1	10	7	5	3	0	0	0	1	26	25	96.15%	22	88.00%
AG	225	200608	2	15	4	1	0	0	0	0	0	20	20	100.00%	20	100.00%
AG	225	200701	1	9	2	0	0	0	0	0	0	11	11	100.00%	11	100.00%
AG	225	200708	2	17	3	0	0	0	0	0	0	20	20	100.00%	20	100.00%
AG	225	200801	1	21	0	0	0	0	0	0	0	21	21	100.00%	21	100.00%
AG	225	200808	2	23	1	0	0	0	0	2	0	26	24	92.31%	24	100.00%
AG	225	200901	1	10	2	1	0	0	0	0	0	13	13	100.00%	13	100.00%
AG	289	200701	1	20	0	0	0	0	0	0	0	20	20	100.00%	20	100.00%
AG	289	200801	1	6	0	0	0	0	0	0	0	6	6	100.00%	6	100.00%

ICCB ACCOUNTABILITY AND PROGRAM REVIEW REPORT

Career and Technical Education Programs

College Name: *Black Hawk College* 5-digit College Number: *50301* Date: *FY2010*
CIP Code Category and Number: Agri-Business Management (12-010101, 16-010101)

CREDIT HOUR GENERATION (Based on the CIP Codes listed above)

PCS-12	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
Credit Hours	227	252	333	314	291	276	299
% Change	--	11.01%	32.14%	-5.71%	-7.32%	-5.15%	8.33%

PCS-16	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
Credit Hours	--	--	--	--	--	--	--
% Change	--	--	--	--	--	--	--

Source: Unit Cost Analysis in the ICCB's Unit Cost Report. Data is summarized from BHC's Unit Cost Report.

UNIT COST ANALYSIS (Cost to provide one credit hour instruction to one student)

PCS-12	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
Departmental	250.96	239.80	214.78	251.91	259.46	254.68	254.32
Peer Group	293.59	218.00	223.28	222.02	256.83	257.02	281.48
State Average	281.34	236.20	237.40	226.40	260.30	244.89	N/A

PCS-16	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
Departmental	--	--	--	--	--	--	--
Peer Group	309.47	264.89	144.64	157.66	165.07	171.52	243.59
State Average	287.18	259.53	215.43	184.96	233.45	220.39	N/A

Source: Unit Cost Analysis in the ICCB's Unit Cost Report. Data is summarized from BHC's Unit Cost Report.

REVENUE-TO-COST RATIO (Based on Curriculum Review analysis)

Agri-business management courses generate less than 8.0% of the Agriculture Program department's credit hours (1250). Therefore, there is no relevant match to one specific department code's revenue-to-cost ratio.

	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008	FY2009
Revenue-to-Cost Ratio: QC							
Revenue-to-Cost Ratio: East							

Source: N/A

Agriculture

AG 100 Introduction to Agriculture 1 cr. hr.
A study of agriculture in our modern society. Emphasis on leadership development, educational goals and employment opportunities. Brief orientation to the College and agriculture division. 1 lecture hour; 0 lab hours per week.

AG 101 Introductory Agriculture Seminar 1 cr. hr.
A study of the agricultural industries that are of service to farmers. Special reports on selected current topics. Part of class time will be utilized by visiting lecturers. Occasionally, a dinner meeting may be held. Required of all full-time agricultural students. 1 lecture hour; 0 lab hours per week.

AG 102 Agriculture Work Experience Seminar 1 cr. hr.
Continuation of AG 101 with special emphasis on developing the work-education experience program. 1 lecture hour; 0 lab hours per week.

AG 107 Agribusiness Work Experience 1-8 cr. hrs.
Prerequisite: Satisfactory completion of 22 credit hours in the Agribusiness curriculum or consent of instructor and concurrent enrollment in AG 102.
Eleven weeks of supervised training in an approved agricultural business. Reports by the student and satisfactory job performance required for credit. 0 lecture hours; 48 lab hours per week.

AG 108 Agricultural Production Work Experience 1-8 cr. hrs.
Prerequisite: Satisfactory completion of 22 credit hours in the Agricultural Production curriculum or consent of instructor and concurrent enrollment in AG 102.
Eleven weeks of supervised training in an approved ag production situation. Reports by the student and satisfactory job performance are required for credit. 0 lecture hours; 48 lab hours per week.

AG 121 Introduction to Agricultural Economics 1-3 cr. hrs.
Surveys the role of agriculture in the present economy, nature and size of agricultural industries, relation of production to domestic and foreign demand, and future economic prospects for agriculture and government. 3 lecture hours; 0 lab hours per week.

AG 122 Farm Management 4 cr. hrs.
Prerequisite: AG 121 or consent of instructor.
The functions of management applied to the problems of agricultural producers and business managers will be studied. Topics to be covered include resource analysis, budgeting, enterprise planning, and labor management. The major focus of the course will be on planning and budgeting. 3 lecture hours; 2 lab hours per week.

AG 123 Agricultural Mathematics 3 cr. hrs.
The practical mathematical background needed for agricultural mechanics, Agribusiness and agricultural production. Includes calculations of land area, planting, fertilizer, chemical and herbicide application rates, storage capacity, material estimates, depreciation, ratio, markups, production rates, and machinery operating costs. 3 lecture hours; 0 lab hours per week.

AG 125 Computers in Agriculture 1-3 cr. hrs.
An introductory course in the use of computers in agricultural situations. Emphasis will be placed on the type of computers used in agriculture, how these computers operate, and the types of computer software available for agricultural use. Students will learn to operate computers through hands-on classroom and laboratory experiences. 2 lecture hours; 2 lab hours per week.

AG 131 Soils and Soil Fertility 4 cr. hrs.
Basic course dealing with the formation, physical, chemical, colloidal, and biological properties of soils. Special emphasis is given to soil conditions that affect plant growth and crop yields. Laboratory experience in texture, structure and fertility. 3 lecture hours; 2 lab hours per week.

AG 132 Field Crop Science 1.5 cr. hrs.
The study of botanical characteristics and cultural practices of commercially important Corn Belt crops, including quality improvements, seed purity, diseases, insects, weeds and crop production techniques. Laboratory exercises focus on selected crop production and management practices. 1.5 lecture hours; 0 lab hours per week.

AG 133 Field Crop Science 2 2 cr. hrs.
The study of botanical characteristics and cultural practices of commercially important Corn Belt crops, including quality improvements, seed purity, diseases, insects, weeds and crop production techniques. Laboratory exercises focus on selected crop production and management practices. Continuation of AG 132. 1 lecture hour; 2 lab hours per week.

AG 134 Field Crop Science 3 .5 cr. hrs.
The study of botanical characteristics and cultural practices of commercially important Corn Belt crops, including quality improvements, seed purity, diseases, insects, weeds and crop production techniques. Laboratory exercises focus on selected crop production and management practices. Continuation of AG 133. .5 lecture hours; 0 lab hours per week.

AG 135 Ag Chemicals 1 1.5 cr. hrs.
The study of the role of chemicals commonly used in agricultural production, including insecticides, herbicides, seed treatments and livestock chemicals. Emphasis is placed on the identification of weeds, insects and plant diseases, as well as prevention, control, and eradication of these problems. Laboratory exercises focus on weed and insect scouting, procedures used in handling and applying

chemicals and comparisons of various pest management practices. 1.5 lecture hours; 0 lab hours per week.

AG 136 Ag Chemicals 2 1 cr. hr.
The study of the role of chemicals commonly used in agricultural production, including insecticides, herbicides, seed treatments and livestock chemicals. Emphasis is placed on the identification of weeds, insects and plant diseases, as well as prevention, control, and eradication of these problems. Laboratory exercises focus on weed and insect scouting, procedures used in handling and applying chemicals and comparisons of various pest management practices. Continuation of AG 135. 0 lecture hours; 2 lab hours per week.

AG 137 Ag Chemicals 3 .5 cr. hrs.
The study of the role of chemicals commonly used in agricultural production, including insecticides, herbicides, seed treatments and livestock chemicals. Emphasis is placed on the identification of weeds, insects and plant diseases, as well as prevention, control, and eradication of these problems. Laboratory exercises focus on weed and insect scouting, procedures used in handling and applying chemicals and comparisons of various pest management practices. Continuation of AG 136. .5 lecture hours; 0 lab hours per week.

AG 138 Crop and Soil Management 3 cr. hr.
Provides students an opportunity to gain experience in advanced crop and soil management. An emphasis will be placed on new technology and products that have been implemented into crop production. The application of geographical information systems and global position equipment in crop production and soil management will also be covered. 3 lecture hours; 0 lab hours per week.

AG 139 Crop and Soil Evaluation 2 1 cr. hr.
Prerequisite: AG 138 or consent of instructor.
Provides students an opportunity to gain experience in evaluating crops and soils. Selection will be based on marketing and/or production standards. A continuation of AG 138. 1 lecture hour; 0 lab hours per week.

AG 141 Animal Science 4 cr. hrs.
A comprehensive view of the livestock industry as a science. Study is based upon biological principles with application to modern livestock management practices for beef, swine, dairy cattle, sheep, and horses. Laboratory to supplement lectures and discussions. 3 lecture hours; 2 lab hours per week.

AG 142 Animal Nutrition 3 cr. hrs.
Study of common feeds and their uses in animal nutrition including calculations of rations for maintenance, growth and production. 3 lecture hours; 0 lab hours per week.

AG 147 Dairy Evaluation 1 cr. hr.
Provides students an opportunity to gain experience in evaluating dairy cattle. Selection will be based on marketing and/or production standards. Consideration will be given to organizing and presenting oral reasons. 1 lecture hour; 0 lab hours per week.

AG 148 Livestock Evaluation I 1 cr. hr.
Provides students an opportunity to gain experience in evaluating livestock. Selection will be based on marketing and/or production standards. Consideration will be given to organizing and presenting oral awards. 1 lecture hour; 0 lab hours per week.

AG 149 Livestock Evaluation 2 1 cr. hr.
Prerequisite: AG 148 or consent of instructor.
Provides an opportunity to gain experience in evaluating livestock. Selection will be based on marketing and/or reasons. Continuation of AG 148. 1 lecture hour; 0 lab hours per week.

AG 171 Materials Handling Equipment 2 cr. hrs.
Mechanics of materials handling for chemicals, feeds and fertilizers; calibration of equipment, and adjustment and maintenance of equipment. Special emphasis on small engines. Laboratory experiences will allow for actual experiences. 1 lecture hour; 2 lab hours per week.

AG 172 Agricultural Commercial Drivers License Training 2 cr. hrs.
This course is required for students in the Associate in Applied Science degree program in agribusiness management in the agricultural chemical application specialty. 1 lecture hours; 2 lab hours per week.

AG 173 Agricultural Chemical Equipment Technology I 1-2 cr. hr.
A course focusing on studies of dry fertilizer material equipment variations, calibration systems and methods, maintenance and service requirements, and actual operation of application equipment. 1 lecture hour; 0 lab hours per week.

AG 174 Agricultural Chemical Equipment Technology II 1-2 cr. hr.
A course focusing on studies of liquid fertilizer and agricultural chemical equipment variations, calibration systems and methods, maintenance and service requirements, and actual operations of liquid application equipment. 2 lecture hour; 0 lab hours per week.

AG 200 Topics in Agriculture .5-3 cr. hrs.
Designed to satisfy specific needs and interest of students in agriculture. Topics will vary and will be announced in advance. This course may be taken more than once provided that different topics are considered. The maximum credit that can be earned is six credit hours. 3 lecture hours; 0 lab hours per week.

AG 201 Advanced Agriculture Work Experience Seminar 1 cr. hr.
Prerequisite: Concurrent enrollment in EQ 209 or consent of instructor.

Special emphasis on preparing for advanced training for final supervised work-education experience and career planning. 1 lecture hour; 0 lab hours per week.

AG 202 Advanced Agriculture Seminar 1 cr. hr.
Prerequisite: AG 101, 102 and 201 or consent of instructor.
Special emphasis will be given to definition and career explanation in the agribusiness field by students enrolled. 1 lecture hour; 0 lab hours per week.

AG 207 Advanced Agribusiness Work Experience 1-5 cr. hrs.
Prerequisite: AG 107 and concurrent enrollment in AG 201.
Similar to AG 109 with emphasis on sales and management of agricultural supply business. One credit hour credit is awarded for satisfactory completion of training manual. 0 lecture hours; 48 lab hours per week.

AG 208 Advanced Agricultural Production Work Experience 1-5 cr. hrs.
Prerequisites: AG 108 and concurrent enrollment in AG 204.
Similar to AG 108 with emphasis on improvement of farm operations problem areas. Satisfactory completion of the training manual is required. 0 lecture hours; 48 lab hours per week.

AG 211 Agricultural Salesmanship 3 cr. hrs.
Study of the basic principles and theories of salesmanship with considerable emphasis given to the practical application. Role playing will be utilized to stress techniques. Sales aids, market promotion and advertising will be included. 3 lecture hours; 0 lab hours per week.

AG 214 Agriculture Technology & Information Management 3 cr. hrs.
A course focusing on new and existing technology in agriculture, the collection of agricultural information, with analysis and applications to areas of agriculture production and ag business management. 2 lecture hours; 2 lab hours per week.

AG 222 Agricultural Marketing 4 cr. hrs.
Prerequisite: AG 122 or consent of instructor.
A course dealing with management factors affecting profits in the operation of agricultural supply and production businesses. These factors include the keeping of records, analyzing records, income tax preparation and management, using credit to finance the business, using insurance in the business, calculating depreciation, and lease agreements. Experiences in making entries and summarizing business records as well as completing income tax forms will be provided. 3 lecture hours; 2 lab hours per week.

AG 223 Agriculture Marketing 3 cr. hrs.
Prerequisite: AG 121 or consent of instructor.
Emphasis is placed on the importance and place of marketing in our economic system. Price determinants, margins, costs and outlets for agricultural products are discussed. 3 lecture hours; 0 lab hours per week.

AG 224 Agricultural Law 3 cr. hrs.
A study of the laws that affect agricultural businesses in the context of labor, taxation, tenancy, liability and other areas. 3 lecture hours; 0 lab hours per week.

AG 225 Computer Applications in Agriculture 3 cr. hrs.
Use of computers in farm and agribusiness management with emphasis on commercially available software for accounting, budgeting, record keeping, and market analysis. 2 lecture hours; 2 lab hours per week.

AG 232 Forage Crops 3 cr. hrs.
Examination of forage crops characteristics and ecology, grasslands of farm and range as related to animal production. 3 lecture hours; 0 lab hours per week.

AG 238 Crop and Soil Evaluation 3 1 cr. hr.
Provides students an opportunity to gain experience in evaluating crops and soils. Selection will be based on marketing and/or production standards. A continuation of AG 139. 1 lecture hour; 0 lab hours per week.

AG 239 Crop and Soil Evaluation 4 1 cr. hr.
Provides students an opportunity to gain experience in evaluating crops and soils. Selection will be based on marketing and/or production standards. A continuation of AG 238. 1 lecture hour; 0 lab hours per week.

AG 241 Artificial Insemination of Cattle 1.5 cr. hrs.
Theory and technology involved in artificial insemination, including semen collection techniques, evaluation of semen, processing of semen for storage, and insemination techniques. 1 lecture hour; 1 lab hour per week.

AG 242 Artificial Insemination of Swine 1.5 cr. hrs.
Theory and technology involved in artificial insemination, including semen collection techniques, evaluation of semen, processing of semen for storage and insemination techniques. 1 lecture hour; 1 lab hour per week.

AG 244 Swine Science 3 cr. hrs.
Prerequisite: AG 141 or AG 285.
A basic course in swine production and management which includes selecting, breeding, feeding, managing and marketing of swine. Laboratory will provide hands-on experience to develop in-depth skills in the rapidly changing technology of the swine industry. 2 lecture hours; 2 lab hours per week.

AG 245 Beef Science 3 cr. hrs.
A basic beef production and management course which includes the cow-calf and feedlot operations. Laboratory exercises to acquire and develop in-depth skills. 2 lecture hours; 2 lab hours per week.

AG 246 Meat Animal Evaluation 3 cr. hrs.
Prerequisite: AG 141 or AG 285.
Live animal and carcass evaluation of meat animals-beef, sheep and swine. Students to acquire and develop in-depth skills in laboratory. 2 lecture hours; 2 lab hours per week.

AG 247 Animal Health 1-2 cr. hrs.
Animal diseases and parasites, their prevention and control. Man's susceptibility to disease. Federal and State regulations. 2 lecture hours; 0 lab hours per week.

AG 248 Livestock Evaluation 3 1 cr. hr.
Prerequisite: AG 148 and AG 149 or consent of instructor.
Provides students an opportunity to gain experience in evaluating livestock. Selection will be based on marketing and/or production standards. Consideration will be given to organizing and presenting oral reasons. Continuation of AG 149. 1 lecture hour; 0 lab hours per week.

AG 249 Livestock Evaluation 4 1 cr. hr.
Prerequisite: AG 148, AG 149, AG 248 or consent of instructor.
Provides students an opportunity to gain experience in evaluating livestock. Selection will be based on marketing and/or production standards. Consideration will be given to organizing and presenting oral reasons. Continuation of AG 248. 1 lecture hour; 0 lab hours per week.

AG 272 Grain Drying and Handling 3 cr. hrs.
A basic course in the operation, adjustment and maintenance of grain-drying equipment in the field. 2 lecture hours; 2 lab hours per week.

AG 273 Lawn and Garden Equipment Repair 1-4 cr. hrs.
This course covers the operation and maintenance of consumer products in the agriculture industry. Topics to be covered include lawnmowers, lawn sweepers, lawn conditioning equipment, snow blowers, leaf blowers, tillers, weed eaters, and chain saws. Emphasis will be given to safety, operation, maintenance, and repair. 2 lecture hours; 4 lab hours per week.

AG 275 Field Machinery Operations I 3 cr. hrs.
Introduces the student to harvesting, tillage, and planting operations. Emphasis will be placed on theory, operation, maintenance and adjustment of the machines. 2 lecture hours; 2 lab hours per week.

AG 276 Field Machinery Operations II 3 cr. hrs.
Introduces the student to theory and maintenance of agricultural planting systems. Includes care, maintenance and calibration of field sprayers. 2 lecture hours; 2 lab hours per week.

AG 280 Introduction to Agricultural Education 3 cr. hrs.
An overview of the agricultural occupations program from the vocational agriculture teacher's role and responsibility in an educational system. Opportunities, methods of certification, and securing positions in the teaching profession. FFA will be an integral part. 3 lecture hours; 0 lab hours per week. IAI: AG 911

AG 281 Agricultural Economics 4 cr. hrs.
An introductory course in agricultural economics, concerned with how limited resources are allocated in order to satisfy unlimited wants. Economic principles are applied to agricultural problems and to the role of agriculture in both the U.S. and world economies. Includes production principles; production costs, supply and revenue; profit maximization; consumption and demand; price theories; price elasticity; market price determination; competitive and noncompetitive markets; and the behavior of the firm under varying market conditions. Other topics examined are the world food situation; world food production; agricultural trade; population growth; agricultural problems and policies; and the role of agriculture in economic development and growth. 4 lecture hours; 0 lab hours per week. IAI: AG 901

AG 282 Introduction to Soil Science 4 cr. hrs.
Prerequisite: Chemistry suggested.
Origin, classification and distribution of soils and their relationship to man and food production. Fundamentals of biological, chemical and physical properties of soils. Laboratory exercises and/or field trips on major topics. 3 lecture hours; 2 lab hours per week. IAI: AG 904

AG 283 Field Crop Science 4 cr. hrs.
Origin, classification, and distribution of soils in their relationship to land and food production. Fundamentals of biological, chemical, and physical properties of soils. Laboratory exercises and/or field trips on major topics. 3 lecture hours; 2 lab hours per week. IAI: AG 903

AG 285 Animal Science 4 cr. hrs.
A comprehensive view of the livestock industry as a science. Study is based upon biological principles with emphasis on modern livestock management practice for beef, swine, dairy cattle and sheep. Laboratory to supplement lectures and discussions. 3 lecture hours; 2 lab hours per week. IAI: AG 902

AG 287 Introductory Agricultural Mechanics 4 cr. hrs.
An introductory agricultural mechanization course which includes agricultural power and machinery, agricultural electrification and application, agricultural structures and soil and water conservation as the major areas of study. 3 lecture hours; 2 lab hours per week. IAI: AG 906

AG 288 Agriculture of Developing Countries 3 cr. hrs.
An examination of the critical role played by agriculture in the economic development of third world countries. Agricultural production systems, policies and problems are evaluated in relation to the economic, social and political structures of selected countries and societies. 3 lecture hours; 0 lab hours per week.

AG 289 Microcomputer Skills for Agriculture 3 cr. hrs.

This course is designed to introduce the student to the concepts, principles and applications of microcomputers as they apply to agriculture and business. Students will learn agriculture and business applications of several common software packages in use today. Evaluation of current software will also be a focus. 2 lecture hours; 2 lab hours per week. IAI: AG 913

Agriculture Programs

To meet the demands of an evolving agricultural field in which jobs require advanced training, the Agriculture Program at Black Hawk College East Campus offers a variety of career and transfer programs. These programs include study in the areas of Agribusiness Management, Agriculture Mechanics (see page 84), Agriculture Production Technology, Agriculture Transfer (see page 102), Horse Science Technology, Equestrian Science, Horticulture Science, Horticulture Transfer (see page 116), and Pre-Veterinary Medicine (see page 122).

Facilities provided include the Agriculture Center at East Campus, the only facility of its kind on a community college campus in Illinois, which serves as a laboratory for student learning. Classrooms, stalls, wash rack, equipment rooms, and indoor as well as outdoor arenas provide a central focus for all agriculture programs. Located on campus is a greenhouse supporting horticulture and agronomy instruction. In addition, soils, crops, horticulture, and agriculture mechanics laboratories on campus give students the opportunity to learn important technical skills associated with agricultural business and industry.

With its strong emphasis on education for employment preparation, the Agriculture Program offers students opportunities for on-the-job training with agriculturally oriented businesses located within the immediate area, across the state, and throughout the nation. Students receive academic credit for their work and gain valuable information and insight into on-the-job demands.

A top priority of the Agriculture Program is to maintain high quality academic standards. In addition, major emphasis is put on the development of the individual outside the classroom. Students enrolled in the Agriculture Program are invited to become active members of the Agribusiness Club. Social, recreational, professional and leadership development are some of the primary objectives of the group available at local, state and national levels. Graduates of the East Campus agriculture programs are encouraged to continue their involvement through the Agribusiness Club Alumni.

Other activities include judging teams in the areas of livestock, horses, dairy, crops, soils, and horticulture. Students participate on a local, state and national level in agricultural scholastic bowls, job interview competitions in several areas of employment, discussion meets, computer skills contests and public speaking contests.

A cooperative agreement with the adjacent community college districts allows students in those districts to enroll in Black Hawk College East Campus agriculture programs and pay the College in-district tuition rate (see page 9). Additionally, the Horse Science Technology and Equestrian Science programs are approved as statewide programs. This allows any Illinois resident to enroll in the programs and pay the Black Hawk College rate of tuition.

For more information about the Agriculture Program or any of its courses, contact the department chair of Applied Science.

Agribusiness Management

Associate in Applied Science Code 9142
Contact Person: East Campus, Bill Good, Ext. 1831, Rm. A-226, or Angela Heckman, Ext. 1724, Rm. A-202B

Students completing the Agribusiness Management Program will find a great demand for their skills and services in the ag chemicals, feed, fertilizer, grain, seeds and other agri-related supply and service businesses. Jobs will be in sales, operation and management.

The Agribusiness Management Program offers classroom instruction and laboratory exercises coupled with supervised on-the-job experience to prepare students for gainful employment.

Special program features include: instructors with practical expertise in their areas of specialization; supervised on-the-job experience during both first and second years of the program; minimum of 3 elective hours of coursework, allowing students to specialize in their areas of interest; practical two-week summer session; 10-week fourth semester enabling students to secure full-time employment on or about April 1; and a majority of courses are in agriculture or are agriculture-related.

FIRST SEMESTER SUGGESTED COURSES		Credit Hours
AG 101	Introductory Ag Seminar	1
AG 121	Ag Economics	3
AG 125	Computers in Agriculture	1
AG 131	Soils and Soil Fertility	4
AG 141	Animal Science	4
* AG Electives		1
Communications Elective		3

SECOND SEMESTER SUGGESTED COURSES

AG 102	Ag Work Experience Seminar	1
AG 107	Agribusiness Work Experience	7
AG 122	Farm Management	4
AG 132	Field Crop Science	1.5
AG 135	Ag Chemicals 1	1.5
AG 171	Ag Materials Handling Equipment	2
* AG Electives		1
Mathematics Elective		3

SUMMER SEMESTER SUGGESTED COURSES

AG 133	Field Crop Science 2	2
AG 136	Ag Chemicals 2	1

THIRD SEMESTER SUGGESTED COURSES

AG 134	Field Crop Science 3	0.5
AG 137	Ag Chemicals 3	0.5
AG 201	Advanced Ag Work Exp. Seminar	1
AG 207	Adv. Agribusiness Work Exp.	5
AG 211	Ag Salesmanship	3
AG 225	Computer App. in Ag	3
* AG Electives		2

FOURTH SEMESTER SUGGESTED COURSES

AG 202	Advanced Ag Seminar	1
AG 222	Agricultural Marketing	4
AG 223	Agriculture Marketing	3
* AG Electives		7

Minimum total hours required for degree 71

*A minimum of 11 elective hours are required in the Agribusiness Management Program. Suggested electives include (Fall Semester) AG 138, 142, 148, 214, 238, 244, 248, 272 and 275; (Spring Semester) 147, 149, 214, 232, 241, 242, 245, 246, 247, 249, and 276.

Agribusiness Management—Crop Protection Technology Option

Associate in Applied Science Code 9143
Contact Person: East Campus, Bill Good, Ext. 1831, Rm. A-226, or Angela Heckman, Ext. 1724, Rm. A-202B

Students completing this program will have the technical skills to operate, calibrate, and maintain agriculture chemical application equipment. Operators can earn an annual income of $30,000 to $40,000 per year. Opportunities for growth and advancement within the agriculture business exists for qualified individuals.

The Agribusiness Management Program offers classroom instruction and laboratory exercises coupled with supervised on-the-job experience to prepare students for employment.

Special program features include: instructors with practical expertise in their areas of specialization; supervised on-the-job experience during both first and second years of the program; minimum of 11 elective hours of coursework, allowing students to specialize in their areas of interest; practical two-week summer session; 10-week fourth semester enabling students to secure full-time employment on or about April 1; and a majority of courses are in agriculture or are agriculture-related.

First Year

FALL SEMESTER

AG 101	Introductory Ag Seminar	1
AG 121	Ag Economics	3
AG 125	Computers in Agriculture	1
AG 131	Soils and Soil Fertility	4
AG 138	Crop and Soil Management	3
AG 172	CDL Training	2
AG 173	Ag Chemical Equipment Tech I	1
HPE 200	First Aid	1
Communications Elective		3

SPRING SEMESTER

AG 102	Ag Work Experience Seminar	1
AG 107	Agribusiness Work Experience	7
AG 122	Farm Management	4
AG 132	Field Crop Science	1.5
AG 135	Ag Chemicals 1	1.5
AG 171	Ag Materials Handling Equipment	2
AG 174	Ag Chemical Equipment Tech II	1
AG Elective		1
Mathematics Elective		3

SUMMER SEMESTER

AG 133	Field Crop Science 2	2
AG 136	Ag Chemicals 2	1

Second Year

FALL SEMESTER

AG 134	Field Crop Science 3	0.5
AG 137	Ag Chemicals 3	0.5
AG 173	Ag Chemical Equipment Tech I	1
AG 201	Advanced Ag Work Exp. Seminar	1
AG 207	Adv. Agribusiness Work Exp.	5
AG 211	Ag Salesmanship	3
AG 225	Computer App. in Ag	3
AG Elective		1

SPRING SEMESTER

AG 174	Ag Chemical Equipment Tech II	1
AG 202	Advanced Ag Seminar	1
AG 214	Agriculture Tech & Info Mgmt	3
AG 222	Agricultural Marketing	4
AG 223	Ag Marketing	3
AG Elective		1

Minimum total hours required for degree 72

NOTE: A minimum of three elective hours in agriculture are required in the Agricultural Chemical Applicator Option. Suggested electives include: (Fall Sem.) AG 138 Crop & Soil Management, AG 238 Crop and Soil Evaluation II, AG 272 Grain Drying and Handling, AG 275 Field Machinery Operation I; (Spring Sem.) AG 232 Forage Crops, AG 276 Field Machinery Operations II.

Agriculture Production Technology

Associate in Applied Science Code 9141
Contact Person: East Campus, Andrew Larson, Ext. 1830, Rm. B-213; or Angela Heckman, Ext. 1724, Rm. A-202B

Students interested in agriculture production with emphasis on crops and/or livestock should consider the Agriculture Production Technology curriculum. Graduates of this program may become employed as farm operators or assistant managers, herdsmen, swine specialists, equipment operators or general farmhands.

Classroom study and laboratory exercises coupled with supervised on-the-job work-experience to prepare students for gainful employment in agriculture.

Special program features include: instructors with practical expertise in their areas of specialization; supervised on-the-job experience during both first and second years of the program; minimum of 11 elective hours of coursework, allowing students to specialize in their areas of interest; practical two-week summer session; 10-week fourth semester enabling students to begin full-time employment on or about April 1; majority of courses are in agriculture or are agriculture-related.

FIRST SEMESTER SUGGESTED COURSES		Credit Hours
AG 101	Introductory Ag Seminar	1
AG 121	Ag Economics	3
AG 131	Soils and Soil Fertility	4
AG 141	Animal Science	4
AG 125	Computers in Agriculture	1
* AG Electives		1
Communications Elective		3

SECOND SEMESTER SUGGESTED COURSES		
AG 102	Ag Work Exp. Seminar	1
AG 108	Ag Production Work Exp.	7
AG 122	Farm Management	4
AG 132	Field Crop Science	1.5
AG 135	Ag Chemicals 1	1.5
AG 171	Materials Handling Equipment	2
* AG Electives		1
Mathematics Elective		3

SUMMER SEMESTER SUGGESTED COURSES		
AG 133	Field Crop Science 2	2
AG 136	Ag Chemicals 2	1

THIRD SEMESTER SUGGESTED COURSES		
AG 201	Advanced. Agricultural Work Experience Seminar	1
AG 208	Advanced Agricultural Production Work Experience	5
AG 275	Field Machinery Operations I	3
AG 134	Field Crop Science 3	0.5
AG 137	Ag Chemicals 3	0.5
AG 225	Computer Applications in Ag	3
* AG Electives		2

FOURTH SEMESTER SUGGESTED COURSES		
AG 202	Advanced Ag Seminar	1
AG 222	Agricultural Marketing	4
AG 223	Ag Marketing	3
* Ag Electives		7

Minimum total hours required for degree 71

* A minimum of 11 elective hours are required in the Agricultural Production Technology Program. Suggested electives offered during the Fall semester include: AG 138, 142, 148, 238, 244, 248, and 272. Electives offered during the Spring semester include: AG 147, 149, 214, 232, 241, 242, 245, 246, 247, 249 and 276.

Agriculture Production

Certificate Codes 9541, 9543, 9544
Contact Person: East Campus, Andrew Larson, Ext. 1830, Rm. B-213; or Angela Heckman, Ext. 1724, Rm. A-202B

Three certificate programs are offered in Agriculture Production. A student with a career interest in beef cattle and swine production may consider one of the following programs. Additional courses may be taken while completing the requirements for a certificate program. Elective coursework beyond the 12-hour certificate requirements available. Elective courses include: AG 141, AG 190 and HORT 191.

Animal Science Certificate Code 9541

FIRST SEMESTER SUGGESTED COURSES		Credit Hours
AG 141	Animal Science	4
AG 244	Swine Science	3

SECOND SEMESTER SUGGESTED COURSES		
AG 245	Beef Science	3
AG 247	Animal Health	2

Minimum total hours required for certificate 12

Beef Production Certificate Code 9543

FIRST SEMESTER SUGGESTED COURSES		
AG 141	Animal Science	4

SECOND SEMESTER SUGGESTED COURSES		
AG 245	Beef Science	3
AG 246	Meat Animal Evaluation	3
AG 247	Animal Health	2

Minimum total hours required for certificate 12

Swine Production Certificate Code 9544

FIRST SEMESTER SUGGESTED COURSES		
AG 141	Animal Science	4
AG 244	Swine Science	3
SECOND SEMESTER SUGGESTED COURSES		
AG 246	Meat Animal Evaluation	3
AG 247	Animal Health	2
Minimum total hours required for certificate		12

Equestrian Science

Associate in Applied Science Code 9096
Contact Person: East Campus, Donna Irvin, Ext. 1840, Rm. A-215, or Angela Heckman, Ext. 1724, Rm. A-202B

Students completing the Equestrian Science Program will find many career opportunities in all phases of the horse industry. Some of the specific jobs available are stewards, riding instructors, trainers, horse show judges and show personnel.

The Equestrian Science Program offers classroom study and laboratory exercises coupled with supervised on-the-job experience to prepare students for employment or for transfer to a four-year school in order to pursue a bachelor's degree related to horsemanship.

Special program features include: hands-on training of horses on campus each semester; general education courses which will easily transfer to four-year schools; elective courses to expand an individual's area of interest and knowledge; supervised on-the-job experience; and an opportunity to participate in horse judging and evaluation.

		Credit Hours
FIRST SEMESTER SUGGESTED COURSES		
AG 125	Computers in Agriculture	1
AG 285	Animal Science **OR**	4
AG 141	Animal Science	
EQ 101	Introductory Equine Seminar	1
EQ 151	Horse Production and Mgt.	4
EQ 158	Horse Evaluation I	1
EQ 161	Prin and Meth of Stock Seat Eq.	4
HPE 200	First Aid	1
Communications Elective		3
SECOND SEMESTER SUGGESTED COURSES		
EQ 102	Horse Science Work Experience Seminar	1
EQ 109	Horse Science Work Experience	7
EQ 154	Horse Equipment and Facilities	3
EQ 159	Horse Evaluation II	1
EQ 167	Fund of Horse Handling and Training	3
Mathematics Elective		3
THIRD SEMESTER SUGGESTED COURSES		
AG 142	Animal Nutrition	3
EQ 262	Princ and Methods of English Eq.	4
EQ 263	Methods of Teach Horsemanship	2
EQ 267	Farrier Science	2
AG 281	Ag Economics **OR**	4
AG 121	Ag Economics	3
*EQ/AG Electives		3 or 4
FOURTH SEMESTER SUGGESTED COURSES		
AG 211	Agricultural Salesmanship	3
AG 225	Computer Applications in Agriculture **OR**	3
AG 289	Microcomputer Skills for Agriculture **OR**	
CS 100	Introduction to Computers	
EQ 264	Advanced Horse Training & Development	4
EQ 266	Horse Show Preparation & Management	2
*EQ/AG Electives		3
Minimum total hours required for degree		70

* A minimum of seven or eight elective hours (depending upon whether AG 121 or AG 281 is taken during the third semester) are required in the Equestrian Science Technology program. Suggested electives include: (Fall Semester) ENG 102, SPEC 101, EQ 253 or EQ 258; (Spring Semester) AG 122, AG 222, AG 232, EQ 152, EQ 254, EQ 259, or EQ 265.

Horse Science Technology

Associate in Applied Science Code 9099
Contact Person: East Campus, Angela Heckman, Ext. 1724, Rm. A-202B

Students completing the Horse Science Technology Program will find a demand for their skills and services in occupations relating to the raising, breeding and management of horses. Some of the specific jobs available include stable manager, groomer, salesperson in tack store and public relations specialist.

The Horse Science Technology Program offers classroom study and laboratory exercises coupled with supervised on-the-job work experience to prepare students for gainful employment in the horse industry.

Special program features include: supervised on-the-job experience during the first and second year, elective courses to expand an individual's areas of interest and knowledge, 8-week Spring semester on campus, with the balance of semester on the job; majority of courses in agriculture or are agriculture-related.

FIRST SEMESTER SUGGESTED COURSES		Credit Hours
AG 125	Computers in Agriculture	1
AG 141	Animal Science **OR**	4
AG 285	Animal Science	
EQ 101	Introductory Equine Seminar	1
EQ 151	Horse Production and Management	4
EQ 158	Horse Evaluation I	1
EQ 161	Princ and Methods of Stock Seat Eq.	4
HPE 200	First Aid	1
Communications Elective		3

SECOND SEMESTER SUGGESTED COURSES		
EQ 102	Horse Science Work Experience Seminar	1
EQ 109	Horse Science Work Experience	8
EQ 154	Horse Equipment and Facilities	3
EQ 159	Horse Evaluation II	1
AG 232	Forage Crops	3
Mathematics Elective		3

THIRD SEMESTER SUGGESTED COURSES		
AG 121	Ag Economics **OR**	3
AG 281	Ag Economics	4
AG 142	Animal Nutrition	3
EQ 253	Horse Health Care	4
EQ 254	Stable Management	3
*EQ/AG Electives		3 or 4

FOURTH SEMESTER SUGGESTED COURSES		
AG 201	Advanced Agric. Work Experience Seminar	1
EQ 209	Advanced Horse Science Work Experience	5
AG 211	Ag Salesmanship	3
AG 225	Computer Applications in Ag	3
*EQ/AG Electives		3

Minimum total hours required for degree 70

* A minimum of six or seven elective hours (depending upon whether AG 121 or AG 281 is taken during the 3rd semester) are required in the Horse Science Technology Program. Suggested electives include: (Fall Semester) AG 131, EQ 258, 262, or 267; (Spring Semester) AG 221, AG 214, AG 222, EQ 167, EQ 259, EQ 263, EQ 264, or EQ 266.

Horse Science Technology Certificate

Certificate Code 9599
Contact Person: East Campus, Angela Heckman, Ext. 1724, Rm. A-202B

Students who are preparing for the increasing job opportunities in occupations relating to the raising, breeding and management of horses and for directly related businesses, should consider this curriculum. Some of the specific jobs available include stable manager, groomer, salesperson in a tack store and public relations specialist.

FIRST SEMESTER SUGGESTED COURSES		Credit Hours
AG 141	Animal Science	4
AG 142	Animal Nutrition	3
EQ 151	Horse Production and Mgmt.	4
EQ 161	Prin. and Meth. of Stock Seat Eq.	4
EQ 253	Horse Health Care	4
EQ 254	Stable Management	3
*EQ/AG Electives		1

SECOND SEMESTER SUGGESTED COURSES		
AG 232	Forage Crops	3
EQ 154	Horse Equip. and Facilities	4
*EQ/AG Electives		1

Minimum total hours required for certificate 30

* A minimum of two elective hours are required for the Horse Science Technology Certificate. Suggested electives include: (Fall Semester)AG 125, EQ 158, AG 224, AG 225 (Spring Semester) AG 102, EQ 109, EQ 159, AG 225.

Horticulture Science

Associate in Applied Science Code 9045
Contact Persons: East Campus, Jeff Hawes, Ext. 1835, Rm. A-216; Angela Heckman, Ext. 1724, Rm. A-202B

The Horticulture Science Program offers courses and laboratory exercises that are necessary in giving students technical knowledge for exciting careers in the horticulture field such as nursery manager, groundskeeper, retail florist, landscape designer, turf and golf course manager, greenhouse manager, lawn service person and worker. An eight week supervised work experience program is completed during the fourth semester of the two year Horticulture Science Program. Students are encouraged to choose their area of interest for their work experience.

Facilities offering internships include landscaping businesses, greenhouses, golf courses and many others. Special program features include: knowledgeable instructors with expertise in their areas of specialization, supervised on-the-job experience during the second year of the program, minimum of nine elective hours of coursework allowing students to specialize in their areas of interest and a majority of courses in horticulture or horticulture related areas.

FIRST SEMESTER SUGGESTED COURSES		Credit Hours
AG 101	Introduction to Ag Seminar	1
AG 121	Agricultural Economics	3
AG 282	Introduction to Soils	4
HORT 192	Landscape Design	3
HORT 284	Introduction to Hort Science	3
Communications Elective		3

SECOND SEMESTER SUGGESTED COURSES		
AG 135	Ag Chemicals 1	1.5
AG 136	Ag Chemicals 2	1
AG 137	Ag Chemicals 3	0.5
BIOL 211	General Botany	4
HORT 194	Identification of Hort Plants	3
HORT 196	Perennials and Ground Cover	3
HORT 198	Turf and Lawn Management	3
HORT Electives		3

THIRD SEMESTER SUGGESTED COURSES		
HORT 292	Greenhouse Crops	3
HORT 294	Greenhouse Management	3
HORT Electives		3
SPEC 101 or SPEC 114		3
Mathematics Elective		3

FOURTH SEMESTER SUGGESTED COURSES		
AG 211	Ag Salesmanship	3
AG 201	Adv. Ag Work Experience Seminar	1
HORT 210	Horticulture Internship/WE	5
HORT 296	Hort Business Management	3
HORT Electives		3

Minimum Total Hours Required for Degree	66

Note: A minimum of 9 elective hours are required in the Horticulture Science program. Suggested electives include: Fall Semester -HORT 190, Identification of Landscape Plants; HORT 193, Trees/Arboriculture; HORT 191, Beginning Floral Design; Spring Semester - HORT 203, Horticulture Research Internship; HORT 293, Small Fruits and Viticulture; HORT 195, Vegetable Production; and HORT 295, Landscape Construction Maintenance and Operation; HORT 203, Horticulture Research Internship.

Horticulture Science Certificate

Certificate Code 9646
Contact Persons: East Campus, Jeff Hawes, Ext. 1835, Rm. A-216; Angela Heckman, Ext. 1724, Rm. A-202B

The one year certificate program is designed to provide students with the skills and knowledge for occupations in the field of horticulture. Specific jobs include nursery person, groundskeeper, floral arranger, landscape worker, turf and golf course manager, greenhouse production worker, garden center worker and many others.

FIRST SEMESTER SUGGESTED COURSES		
AG 101	Introduction to Ag Seminar	1
HORT 284	Introduction to Hort Science	3
AG 131	Soils and Soil Fertility	4
HORT 192	Landscape Design	3

SECOND SEMESTER SUGGESTED COURSES		
AG 135	Ag Chemicals 1	1.5
AG 136	Ag Chemicals 2	1
AG 137	Ag Chemicals 3	0.5
BIOL 211	General Botany	4
HORT 194	Identification of Hort Plants	3
HORT 196	Perennials and Ground Cover	3
HORT 198	Turf and Lawn Management	3
HORT 296	Horticulture Business Management	3

Minimum Total Hours Required for Certificate	30

FACT SHEET

Black Hawk COLLEGE

Agri-Business Management:

Associate in Applied Science Degree Code: 9142

This degree is offered at the East Campus only. Some courses for this degree are offered at the Quad-Cities Campus.

Description

Students completing the Agri-Business Management Program will find a great demand for their skills and services in ag chemicals, feed, fertilizer, grain, seeds, and other agri-related supply and service businesses. Career opportunities will be in sales, operations, and management.

The Agri-Business Management Program offers classroom instruction and laboratory exercises coupled with supervised on-the-job experience to prepare students for employment.

Special program features include: Instructors with practical expertise in their areas of specialization; supervised on-the-job experience during both first and second years of the program; minimum of eleven elective hours of coursework, allowing students to specialize in their areas of interest; practical two-week summer session: ten-week 4th semester enabling students to secure full time employment on or about April 1; and a majority of courses in agriculture or agriculture related areas.

FIRST YEAR

FALL SEMESTER		SEM. HRS.
AG 101	Introductory Ag Seminar	1
AG 121	Ag Economics	3
AG 125	Computers in Agriculture	1
AG 131	Soils & Soil Fertility	4
AG 141	Animal Science	4
Communications Elective		3
AG Elective		1
	Semester Total	**17**

SPRING SEMESTER		SEM. HRS.
AG 102	Ag Work Experience Seminar	1
AG 107	Agri-Business Work Experience	7
AG 122	Intro to Ag Management	4
AG 132	Field Crop Science I	1.5
AG 135	Ag Chemicals I	1.5
AG 171	Ag Materials Handling Equipment	2
AG Elective		1
Mathematics Elective		3
	Semester Total	**21**

SUMMER SEMESTER		SEM. HRS.
AG 133	Field Crop Science II	2
AG 136	Ag Chemicals II	1
	Summer Total	**3**

SECOND YEAR

FALL SEMESTER		SEM. HRS.
AG 134	Field Crop Science 3	0.5
AG 137	Ag Chemicals 3	0.5
AG 201	Adv. Ag Work Exp. Seminar	1
AG 207	Adv. Ag-Business Work Exp	5
AG 211	Ag Salesmanship	3
AG 225	Computer Applications in Ag	3
AG Electives		2
	Semester Total	**15**

SPRING SEMESTER		SEM. HRS.
AG 202	Advanced Ag Seminar	1
AG 222	Advanced Ag Management	4
AG 223	Ag Marketing	3
AG Electives		8
	Semester Total	**16**
	Total Program Hours	**72**

NOTE: A minimum of eleven elective hours in agriculture are required in the Agri-Business Program. Suggested electives include: **Fall Semester:** AG 138, Crop & Soil Management; AG 142, Animal Nutrition; AG 148, Livestock Evaluation I; AG 172, CDL Training; AG 173, Ag Chemical Equipment Tech I; AG 214, Ag Technology & Information Management; AG 238, Crop and Soil Evaluation III; AG 244, Swine Science; AG 248, Livestock Evaluation III; AG 272, Grain Drying and Handling; AG 275, Field Machinery Operation I. **Spring Semester:** AG 139, Crop and Soil Evaluation II; AG 147, Dairy Evaluation; AG 149, Livestock Evaluation II; AG 174, Ag Chemical Equipment Tech II; AG 232, Forage Crops; AG 239, Crop and Soil Evaluation IV; AG 241, Artificial Insemination of Cattle; AG 242, Artificial Insemination of Swine; AG 245, Beef Science; AG 246, Meat Animal Evaluation; AG 247, Animal Health; AG 249, Livestock Evaluation IV; AG 276, Field Machinery Operations II.

Admission Requirements

High school graduate or equivalent.

Desirable Background

1. A strong interest in agriculture is desirable.
   A background in agriculture is helpful but not necessary.
2. The student should have or develop good study skills.

Employment Opportunities

Employment opportunities in the agri-business field are numerous. Local firms, as well as firms throughout the state, are always looking for top graduates. Beginning graduates' salary range from $8 to $11 per hour. Positions in the industry with several years of experience range from $28,000 to $50,000.

Faculty

The agriculture classes are taught by highly qualified faculty with background and expertise in the specialty area.

Facilities

Black Hawk College's classrooms are modern and well equipped to meet the instructional needs of students. The Agriculture Center, consisting of the Pavilion, the Annex and the new Arena, serves as a laboratory for students learning. An Agronomy Laboratory gives students opportunities to work with crops using the latest scientific information, technology, and equipment.

Enrollment

Registration for fall classes begins in April; registration for spring classes begins in early November. New students must take a placement test (COMPASS) prior to registration. Students coming from a distance to attend Black Hawk College–East Campus may make arrangements on specified test days to test in the morning and consult an advisor in the afternoon to plan an appropriate schedule of classes.

Additional Sources of Information

Angela Heckman
Recruiter– Marketing Department
Black Hawk College East Campus
Phone: (309) 854-1724
E-mail: heckmana@bhc.edu

Bill Good
Professor
Black Hawk College East Campus
Phone: (309) 852-5671, ext. 6274
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Andrew Larson
Associate Professor
Black Hawk College East Campus
Phone: (309) 852-5671, ext. 6260
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Quad-Cities Campus
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Moline, Illinois 61265-5899
1-800-796-1311

6/08

Agriculture Programs

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The Agribusiness Management Program offers classroom instruction and laboratory exercises coupled with supervised on-the-job experience to prepare students for gainful employment.

Special program features include: instructors with practical expertise in their areas of specialization; supervised on-the-job experience during both first and second years of the program; minimum of 3 elective hours of coursework, allowing students to specialize in their areas of interest; practical two-week summer session; 10-week fourth semester enabling students to secure full-time employment on or about April 1; and a majority of courses are in agriculture or are agriculture-related.

FIRST SEMESTER SUGGESTED COURSES		Credit Hours
AG 101	Introductory Ag Seminar	1
AG 121	Ag Economics	3
AG 125	Computers in Agriculture	1
AG 131	Soils and Soil Fertility	4
AG 141	Animal Science	4
* AG Electives		1
Communications Elective		3

SECOND SEMESTER SUGGESTED COURSES

AG 102	Ag Work Experience Seminar	1
AG 107	Agribusiness Work Experience	7
AG 122	Farm Management	4
AG 132	Field Crop Science	1.5
AG 135	Ag Chemicals 1	1.5
AG 171	Ag Materials Handling Equipment	2
* AG Electives		1
Mathematics Elective		3

SUMMER SEMESTER SUGGESTED COURSES

AG 133	Field Crop Science 2	2
AG 136	Ag Chemicals 2	1

THIRD SEMESTER SUGGESTED COURSES

AG 134	Field Crop Science 3	0.5
AG 137	Ag Chemicals 3	0.5
AG 201	Advanced Ag Work Exp. Seminar	1
AG 207	Adv. Agribusiness Work Exp.	5
AG 211	Ag Salesmanship	3
AG 225	Computer App. in Ag	3
* AG Electives		2

FOURTH SEMESTER SUGGESTED COURSES

AG 202	Advanced Ag Seminar	1
AG 222	Agricultural Marketing	4
AG 223	Agriculture Marketing	3
* AG Electives		7

Minimum total hours required for degree 71

*A minimum of 11 elective hours are required in the Agribusiness Management Program. Suggested electives include (Fall Semester) AG 138, 142, 148, 214, 238, 244, 248, 272 and 275; (Spring Semester) 147, 149, 214, 232, 241, 242, 245, 246, 247, 249, and 276.

Agribusiness Management—Crop Protection Technology Option

Associate in Applied Science Code 9143
Contact Person: East Campus, Bill Good, Ext. 1831, Rm. A-226, or Angela Heckman, Ext. 1724, Rm. A-202B

Students completing this program will have the technical skills to operate, calibrate, and maintain agriculture chemical application equipment. Operators can earn an annual income of $30,000 to $40,000 per year. Opportunities for growth and advancement within the agriculture business exists for qualified individuals.

The Agribusiness Management Program offers classroom instruction and laboratory exercises coupled with supervised on-the-job experience to prepare students for employment.

Special program features include: instructors with practical expertise in their areas of specialization; supervised on-the-job experience during both first and second years of the program; minimum of 11 elective hours of coursework, allowing students to specialize in their areas of interest; practical two-week summer session; 10-week fourth semester enabling students to secure full-time employment on or about April 1; and a majority of courses are in agriculture or are agriculture-related.

First Year

FALL SEMESTER

AG 101	Introductory Ag Seminar	1
AG 121	Ag Economics	3
AG 125	Computers in Agriculture	1
AG 131	Soils and Soil Fertility	4
AG 138	Crop and Soil Management	3
AG 172	CDL Training	2
AG 173	Ag Chemical Equipment Tech I	1
HPE 200	First Aid	1
Communications Elective		3

SPRING SEMESTER

AG 102	Ag Work Experience Seminar	1
AG 107	Agribusiness Work Experience	7
AG 122	Farm Management	4
AG 132	Field Crop Science	1.5
AG 135	Ag Chemicals 1	1.5
AG 171	Ag Materials Handling Equipment	2
AG 174	Ag Chemical Equipment Tech II	1
AG Elective		1
Mathematics Elective		3

SUMMER SEMESTER

AG 133	Field Crop Science 2	2
AG 136	Ag Chemicals 2	1

Second Year

FALL SEMESTER

AG 134	Field Crop Science 3	0.5
AG 137	Ag Chemicals 3	0.5
AG 173	Ag Chemical Equipment Tech I	1
AG 201	Advanced Ag Work Exp. Seminar	1
AG 207	Adv. Agribusiness Work Exp.	5
AG 211	Ag Salesmanship	3
AG 225	Computer App. in Ag	3
AG Elective		1

SPRING SEMESTER

AG 174	Ag Chemical Equipment Tech II	1
AG 202	Advanced Ag Seminar	1
AG 214	Agriculture Tech & Info Mgmt	3
AG 222	Agricultural Marketing	4
AG 223	Ag Marketing	3
AG Elective		1

Minimum total hours required for degree 72

NOTE: A minimum of three elective hours in agriculture are required in the Agricultural Chemical Applicator Option. Suggested electives include: (Fall Sem.) AG 138 Crop & Soil Management, AG 238 Crop and Soil Evaluation II, AG 272 Grain Drying and Handling, AG 275 Field Machinery Operation I; (Spring Sem.) AG 232 Forage Crops, AG 276 Field Machinery Operations II.