## **CURRICULUM GUIDE** Animal and Veterinary Sciences, BS (Animal Science Concentration) 2022-2023

Website: www.agriculture.eku.edu Email Contact: agriculture@eku.edu

The schedule below is an **EXAMPLE** of how you can arrange your class schedule. Please consult your advisor for specific changes that may need to be made.

	Fall Semester		Spring Semester		Course Number	Course Name
	BTO 100	1	<sup>G</sup> CHE 111 (fulfills Gen. Ed. 4)	3		CATION & UNIVERSITY REQUIREMENTS (37)
Freshman				-	BTO 100	Business and Technology Orientation (1)
Year	AGR 125	3	CHE 111L	1		
i cui	AGR 126	1	<sup>G</sup> ECO 120 (fulfills Gen. Ed. 5B)	3	COLLEGE REQU	
	<sup>G</sup> BIO 112 (fulfills Gen. Ed. 4)	4	Gen. Ed. 1B ( <i>ENG 102</i> )	3	AGR 305 BTS 400	Professional Skills Seminar (1)
	<sup>G</sup> MAT 112 (or higher)		Gen. Ed. 1C (Oral Comm.)	3	B15 400	College to Careers Seminar (0)
	(fulfills Gen. Ed. 2)	3	Gen. Ed. 5A ( <i>History</i> )	3	CORE COURSE	REQUIREMENTS (31-33)
	Gen. Ed. 1A ( <i>ENG 101</i> )	3			∫ AGR 125	Principles of Animal Science (3)
					l AGR 126	Animal Science Laboratory (1)
	TOTAL	15	TOTAL	10	AGR 304	Pest Management (4)
	TOTAL	12	TOTAL	16	AGR 308	Agricultural Economics (3)
Cambanana	AGR 321 (fall only)	4	AGR 225 (spring only) or 330 <sup>+</sup> (2)	3*	AGR 310 <u>or</u> AGR 350 or	Principles of Agribusiness Management (3) Agricultural Marketing (3)
Sophomore	CHE 112	3		-	AGR 440	Agricultural Financing (3) (spring only)
Year			† AGR 301, 302, <u>or</u> 349	1	AGR 321	Feeds and Feeding (4) (fall only)
Tear	CHE 112L	1	CHE 361	3	AGR 411	Senior Seminar (1)
	BIO 111	4	CHE 361L	1	AGR 499 <u>or</u>	Agricultural Advocacy and Issues Capstone (3)
	Gen. Ed. 3B (Humanities)	3	§ Animal Science Elective	3*	AGR 509	Agricultural Research Methods and Interpreta
			Gen. Ed. 6 (Diversity) (writing			
			intensive)	3		Bracketed items must be taken concurrently
			intensivey	5	†PLUS THREE (3) HOURS selected from:	
	TOTAL	15	TOTAL	14	AGR 301	Directed Work Experience (1-4)
	TOTAL	15	TOTAL	14	AGR 302 AGR 349	Directed Work Experience – Management Pra Applied Learning in Agriculture (.5-8)
Junior	AGR 308	3	AGR 305	1		COURSES selected from (animal production election)
	§ Animal Science Elective	3*	+ AGR 301, 302, or 349	1	AGR 255	Companion Animal Management (3)
Year	++ Animal Production Elective	4◆	STA 215 or 270 <sup>+ (4)</sup>	3•	AGR 326	Light Horse Production and Management (4)
	* Science Elective	3•	§ Animal Science Elective	3•	AGR 327	Beef Production (4) (fall only)
			-	-	AGR 328	Swine Production (4)
	Gen. Ed. 3A <i>(Arts)</i>	3	* Science Elective	4◆	AGR 329	Sheep and Goat Production (4)
			Gen. Ed. 6 <i>(Diversity)</i>	3	AGR 332 AGR 380	Poultry Production and Management (3) Technical Management of Dairy Cattle (4) (fall
						CE CONCENTRATION REQUIREMENTS (14-18)
	TOTAL	16	TOTAL	15	AGR 225 or	Evaluation and Selection of Livestock (3) (sprir
					AGR 330	Animal Products (2)
Senior	AGR 304	4	AGR 411	1	§ PLUS FOUR (4)	COURSES selected from: (animal science elective
Senior	AGR 310, 350, or 440 (spring	3	AGR 499 <u>or</u> 509 (ACCT	-	AGR 312	Ecology and Management of Grasslands and P
Year	only)	5		2	AGR 372	Topics and Laboratories in Animal Sciences (3)
	+ AGR 301, 302 <sup>♦ (3)</sup> , or 349	1*	capstone)	3	AGR 373	Animal Diseases (4) (fall only)
	· · · · · -		BTS 400	0	AGR 374	Genetics of Livestock Improvement (3) (spring Reproduction and Artificial Insemination of Do
	++ Animal Production Elective		§ Animal Science Elective	3*	AGR 375	Animals (4)
	Free Elective	3	Free Elective	3	AGR 376	Domestic Animal Anatomy (4)
			Free Elective	3	AGR 377	Livestock Behavior and Welfare (3)
			Free Elective	1	AGR 421	Animal Nutrition (3) (spring only)
				-		OURSE REQUIREMENTS (24-30)
					<sup>G</sup> BIO 111	Cell and Molecular Biology (4)
		. –			BIO 112 ∫ <sup>6</sup> CHE 111	Ecology and Evolution (4) General Chemistry I (3)
	TOTAL	15	TOTAL	14	CHE 111	General Chemistry Lab I (1)
	1		1		[* CHE 112	General Chemistry II (3)
				4.9.0	* CHE 112L	General Chemistry Lab II (1)
		IOTAL	HOURS TO DEGREE COMPLETION	120	<b>* CHE 361</b>	Organic Chemistry I (3)

\* PREREQUISITES: Consult with your advisor and/or the University catalog regarding prerequisites for upper division AGR core and concentration courses and supporting courses outside the department.

Total hours may vary depending on elective choices. These class choices are labeled using a diamond (�). The planner above has been designed based on one possible combination that you can take and still meet requirements. You MUST have a total of 120 hours to meet degree requirements.

Upper division courses: All students are required to have a minimum of 42 hrs. upper division (300level or above) courses distributed throughout Major/Supporting/Gen Ed/Free Electives categories.

Refer to the University Catalog at http://www.catalogs.eku.edu/ regarding University and General Education Requirements. All baccalaureate degree seeking students who enter the University are required to successfully complete one writing intensive course following completion of ENG 102, ENG 105, or HON 102/103. Writing intensive courses are designated with the suffix "W" following the course prefix and number (e.g. HUM 300W).

Applied Critical & Creative Thinking (ACCT) Requirement: Agriculture majors will fulfill ACCT with AGR 499 or AGR 509. (Credit hours are incorporated into program requirements.)

Produced by the College of Science, Technology, Engineering, and Mathematics 2022-23

Department of Agriculture 521 Lancaster Ave. 2 Carter Bldg. Richmond, KY 40475 859-622-2228

COLLEGE REQUIREMENTY (J)         AGR 305       Professional Skills Seminar (J)         BTS 400       College to Careers Seminar (D)         CORE COURSE REQUIREMENTS (31-33)         AGR 126       Animal Science Laboratory (J)         AGR 304       Pest Management (A)         AGR 305       Agricultural Economics (3)         AGR 306       Agricultural Marketing (3)         AGR 310 or       Agricultural Marketing (3)         AGR 400       Agricultural Marketing (3)         AGR 415       Seminar (J)         AGR 420       Agricultural Marketing (3)         AGR 431       Senior Seminar (J)         AGR 440       Agricultural Advocacy and Issues Capstone (3)         AGR 459       Agricultural Research Methods and Interpretation (3)         Bracketed items must be taken concurrently         *PPLUS THREE (3) HOURS selected from:         AGR 302       Directed Work Experience (-1-4)         AGR 303       Directed Work Experience (-1-4)         AGR 304       Applied Learning in Agriculture (5-8)         *IPUUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (3)         AGR 327       Deutry Pr	BTO 100	Business and Technology Orientation (1)				
AGR 305       Professional Skills Seminar (J)         BT5 400       College to Careers Seminar (O)         CORE COURSE RECULIREMENTS (31-33)       [AGR 125         AGR 125       Animal Science Laboratory (J)         AGR 304       Pest Management (A)         AGR 305       Agricultural Economics (3)         AGR 306       Agricultural Financing (3) (spring only)         AGR 410       Agricultural Financing (3) (for only)         AGR 420       Agricultural Research Methods and Interpretation (3)         AGR 430       Directed Work Experience (1-4)         AGR 301       Directed Work Experience - Management Practicum (3)         AGR 320       Directed Work Experience - Management Practicum (3)         AGR 320       Directed Work Experience - Management (4)         AGR 320       Directed Work Experience - Management (3)         AGR 320       Directed Work Experience - Management (3)         AGR 325       Companion Animal Management (3)         AGR 325       Companion Animal Management (3)         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (3)         AGR 325       Swine Production (4)         AGR 326       Light Horse Production of Livestock (3) (spring only)         AGR 327       Deolector of L	COLLEGE REQUIR	REMENT (1)				
CORE COURSE REQUIREMENTS (31-33) AGR 125 Principles of Animal Science (3) AGR 126 Animal Science Laboratory (1) AGR 304 Pest Management (4) AGR 300 Agricultural Economics (3) AGR 310 or Principles of Agribusiness Management (3) AGR 310 or Agricultural Marketing (3) AGR 440 Agricultural Marketing (3) AGR 499 or Agricultural Marketing (3) AGR 499 or Agricultural Research Methods and Interpretation (3) Bracketed items must be token concurrently †PLUS THREE (3) HOURS selected from: AGR 302 Directed Work Experience (1-4) AGR 302 Directed Work Experience (1-4) AGR 302 Directed Work Experience (-Management Practicum (3) AGR 326 Light Horse Production and Management (3) AGR 327 Deel Production and Management (3) AGR 328 Swine Production and Management (4) AGR 329 Sheep and Goal Production and Management (4) AGR 329 Sheep and Goal Production (4) AGR 320 Technical Management of Dairy Cattle (4) (foll only) ANIMAL SCIENCE CONCENTRATION REQUIRENTS (44-18) AGR 327 Dopics and Laboratories in Animal Sciences (3) AGR 327 Topics and Laboratories in Animal Sciences (3) AGR 327 Livestock Behavior and Welfare (3) AGR 327 Livestock Behavior and Artificial Insemination of Domestic Animals (4) AGR 327 Livestock Behavior and Management (3) AGR 327 Livestock Behavior and Metifice (3) AGR 327 Animal Nutrition (3) (spring only) BUDPORTING COURSE REQUIREMENTS (24-30) <sup>6</sup> MAT 1128 Aglebra: Purnomials (1-5) <sup>6</sup> MAT 1128 Aglebra: Purnomials (1-5) <sup>6</sup> MAT 1128 Aglebra: Purnomials (1-5) <sup>6</sup> MAT 1128 Aglebra: Purnomials (1-5) <sup></sup>	AGR 305	Professional Skills Seminar (1)				
[AGR 125       Principles of Animal Science (3)         AGR 126       Animal Science Laboratory (1)         AGR 308       Agricultural Economics (3)         AGR 310 or       Principles of Agribusiness Management (3)         AGR 310 or       Agricultural Marketing (3)         AGR 320 or       Agricultural Marketing (3)         AGR 440       Agricultural Marketing (3)         AGR 411       Senior Seminar (1)         AGR 429 or       Agricultural Research Methods and Interpretation (3)         Bracketed items must be taken concurrently <b>†PLUS THREE (3) HOURS</b> selected from:         AGR 302       Directed Work Experience (1-4)         AGR 302       Directed Work Experience - Management Practicum (3)         AGR 320       Directed Work Experience - Management (4)         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (4)         AGR 327       Beef Production (4)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production of Livestock (3) (spring only)         AGR 320       Animal Products (2)         § PUS FOUR (4) COURSES selected from: (animal science electives)         AGR 320       Animal Products (2)         § Pust FOUR (4) COURSES selected from (3) (5) (s	BTS 400	College to Careers Seminar (0)				
L AGR 126 Animal Science Laboratory (1) AGR 304 Pest Management (4) AGR 304 Agricultural Economics (3) AGR 310 or Principles of Agribusiness Management (3) AGR 310 or Agricultural Marketing (3) AGR 440 Agricultural Financing (3) (spring only) AGR 321 Feeds and Feeding (4) (fall only) AGR 321 Feeds and Feeding (4) (fall only) AGR 440 Agricultural Research Methods and Interpretation (3) Bracketed items must be taken concurrently <b>*PLUS THREE (3) HOURS selected from:</b> AGR 301 Directed Work Experience (1-4) AGR 301 Directed Work Experience (1-4) AGR 320 Directed Work Experience (1-4) AGR 321 Ecology applied Learning in Agriculture (.5-8) <b>*IPUSUS THREE (3) HOURS selected from</b> (animal production elective): AGR 325 Companion Animal Management (3) AGR 325 Companion Animal Management (3) AGR 325 Light Horse Production (4) AGR 325 Source Production (4) AGR 326 Source Concentration (4) AGR 327 Beef Production (4) AGR 328 Swine Production (4) AGR 329 Sheep and Goat Production (4) AGR 329 Sheep and Goat Production (4) AGR 329 Concent (4) AGR 320 Animal Products (2) <b>* PLUS FOUR (4) COURSES selected from:</b> (animal science (3) AGR 321 Ecology and Management of Dairy Cattle (4) (foll only) <b>ANIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)</b> AGR 327 Topics and Laboratories in Animal Sciences (3) AGR 373 Animal Diseases (4) (fall only) AGR 374 Genetics of Livestock Improvement (3) (spring only) AGR 375 Domestic Animal Anatomy (4) AGR 376 Domestic Animal Anatomy (4) AGR 376 Domestic Animal Anatomy (4) AGR 377 Livestock Behavior and Welfare (3) AGR 376 Domestic Animal Anatomy (4) AGR 377 Livestock Behavior and Welfare (3) AGR 376 Domestic Animal Anatomy (4) CHE 111 General Chemistry L30 (* HAT 120 General Chemistry L30 (* MAT 121 General	CORE COURSE RE	QUIREMENTS (31-33)				
AGR 304       Pest Management (4)         AGR 310 or       Principies of Agribusiness Management (3)         AGR 310 or       Agricultural Economics (3)         AGR 310 or       Agricultural Financing (3) (spring only)         AGR 411       Senior Seminar (1)         AGR 420       Agricultural Advacacy and Issues Capstone (3)         AGR 320       Agricultural Research Methods and Interpretation (3)         Bracketed items must be taken concurrently         *PLUS THREE (3) HOURS selected from:         AGR 320       Directed Work Experience (1-4)         AGR 320       Directed Work Experience - Management Practicum (3)         AGR 329       Applied Learning in Agriculture (.5-8)         *IPLUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (3)         AGR 329       Poultry Production and Management (3)         AGR 320       Technical Management of Dairy Cattle (4) (foll only)         AGR 320       Poultry Production and Unsubjectives):         AGR 326       Ecology and Management of Grasslands and Pastures (3)         AGR 327       Topics and Laboratories in Animal Sciences (3)         AGR 327       T	-					
AGR 308       Agricultural Economics (3)         AGR 310 or       Principles of Agricultural Marketing (3)         AGR 350 or       Agricultural Marketing (3)         AGR 321       Feeds and Feeding (4) (foll only)         AGR 411       Senior Seminar (1)         AGR 439 or       Agricultural Advocacy and Issues Capstone (3)         AGR 301       Directed Work Experience (1-4)         AGR 302       Directed Work Experience (1-4)         AGR 320       Directed Work Experience (- Management Practicum (3)         AGR 321       Feeds and Feeding (4) (foll only)         AGR 322       Companion Animal Management (3)         AGR 325       Companion Animal Management (4)         AGR 326       Light Horse Production and Management (4)         AGR 327       Beef Production (4) (foll only)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 330       Technical Management of Dairy Cattle (4) (foll only)         AJGR 330       Animal Products (2)         PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 332       Poultry Productors (2) (foll only)         AJGR 330       Animal Products (2)         PLUS FOUR (4) COURSES selected from: (animal science (2)         AGR 331						
AGR 310 or AGR 350 or AGR 350 or Agricultural Marketing (3)       AGR 440         AGR 440       Agricultural Marketing (3)         AGR 440       Agricultural Financing (3) (spring only)         AGR 441       Senior Semianr (1)         AGR 459       Agricultural Research Methods and Interpretation (3)         Bracketed items must be taken concurrently         †PLUS THREE (3) HOURS selected from:         AGR 301       Directed Work Experience (1-4)         AGR 302       Directed Work Experience - Management Practicum (3)         AGR 329       Applied Learning in Agriculture (.5-8)         †1PLUS TWO (2) COURSES selected from (animal production elective):         AGR 320       Light Horse Production and Management (4)         AGR 320       Light Horse Production (4)         AGR 320       Swine Production (4)         AGR 321       Poultry Production and Management (3)         AGR 322       Sheep and Goat Production (4)         AGR 323       Poultry Production of Unsetock (3) (spring only)         AGR 324       Poultry Production of Lisestock (3) (spring only)         AGR 325       Ecology and Management of Grasslands and Pastures (4)         AGR 327       Topics and Laboratories in Animal Science electives)         AGR 327       Topics and Laboratories in Animal Sciences (3)         AGR 327						
AGR 350 or AGR 440       Agricultural Marketing (3) (spring only)         AGR 421       Senior Seminar (1)         AGR 431       Senior Seminar (1)         AGR 430       Agricultural Advocacy and Issues Capstone (3)         AGR 509       Agricultural Research Methods and Interpretation (3)         Bracketed items must be taken concurrently         *PLUS THREE (3) HOURS selected from:         AGR 302       Directed Work Experience (1-4)         AGR 303       Applied Learning in Agriculture (.5-8)         *I*PLUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (3)         AGR 327       Beef Production (4) (fail only)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 320       Technical Management of Dairy Cattle (4) (fail only)         AMIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)         AGR 325       Valuation and Selection of Livestock (3) (spring only)         AGR 327       Topics and Laboratories in Animal Sciences (3)         AGR 328       Animal Product (2)         \$ PLUS FOUR (4) COURSES selected from: (animal Acience (3)         AGR 327       Topics and Laboratories in Animal Sciences (3)						
AGR 321       Feeds and Feeding (4) (foll only)         AGR 411       Senior Seminar (1)         AGR 499       Agricultural Advocacy and Issues Capstone (3)         AGR 309       Agricultural Research Methods and Interpretation (3)         Bracketed items must be token concurrently         *PLUS THREE (3) HOURS selected from:         AGR 301       Directed Work Experience (1-4)         AGR 302       Directed Work Experience - Management Practicum (3)         AGR 314       Applied Learning in Agriculture (.5-8)         *\PPLUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production (4)         AGR 327       Beef Production (4) (fall only)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         AGR 320       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal Science electives)         AGR 327       Topics and Laboratories in Animal Sciences (3)         AGR 327       Topics and Laboratories in Animal Sciences (3)         AGR 327       Topics and Laboratories in Animal Sciences (3)         AGR 327       Animal Diseases (4) (fall only) </td <td>AGR 350 <u>or</u></td> <td></td>	AGR 350 <u>or</u>					
AGR 411       Senior Seminar (1)         AGR 499 or       Agricultural Advocacy and Issues Capstone (3)         AGR 509       Agricultural Research Methods and Interpretation (3)         Bracketed items must be taken concurrently         *PLUS THREE (3) HOURS selected from:         AGR 301       Directed Work Experience (1-4)         AGR 302       Directed Work Experience - Management Practicum (3)         AGR 320       Directed Work Experience - Management Practicum (3)         AGR 321       Companion Animal Management (3)         AGR 322       Companion Animal Management (3)         AGR 323       Swine Production (4) (fall only)         AGR 324       Swine Production (4)         AGR 325       Companion Animal Management (4)         AGR 326       Light Horse Production (4)         AGR 327       Beef Production (4)         AGR 328       Swine Production R0         AGR 329       Sheep and Goat Production (4)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         AGR 325       Eulation and Selection of Livestock (3) (spring only)         AGR 326       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 327       Topics and Laboratories in Animal Sciences (3)         AGR 327						
AGR 499 or AGR 509       Agricultural Advocacy and Issues Capstone (3) Agricultural Research Methods and Interpretation (3)         Bracketed items must be taken concurrently         *PLUS THREE (3) HOURS selected from:         AGR 301       Directed Work Experience - Management Practicum (3)         AGR 302       Directed Work Experience - Management Practicum (3)         AGR 303       Applied Learning in Agriculture (.5-8)         ************************************						
AGR 509       Agricultural Research Methods and Interpretation (3)         Bracketed items must be taken concurrently         PLUS THREE (3) HOURS selected from:         AGR 301       Directed Work Experience (1-4)         AGR 302       Directed Work Experience - Management Practicum (3)         AGR 304       Applied Learning in Agriculture (.5-8)         †*PLUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (3)         AGR 328       Swine Production (4)         AGR 330       Technical Management of Darry Cattle (4) (foll only)         AGR 330       Technical Management of Grasslands and Pastures (4)         AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (foll only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 376       Domestic Animing Anatomy (4)         AGR 376						
†PLUS THREE (3) HOURS selected from:         AGR 301       Directed Work Experience (1-4)         AGR 302       Directed Work Experience – Management Practicum (3)         AGR 349       Applied Learning in Agriculture (.5-8)         ††PLUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (4)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         AINIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-13)         AGR 320       Animal Productis (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 371       Livestock Behavior and Selection (4)         BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolut						
†PLUS THREE (3) HOURS selected from:         AGR 301       Directed Work Experience (1-4)         AGR 302       Directed Work Experience – Management Practicum (3)         AGR 314       Applied Learning in Agriculture (.5-8)         ††PLUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (4)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         AGR 320       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPORTING COURSE REQUIREMENTS (124-30)       6 <sup>6</sup> BIO 111						
AGR 301       Directed Work Experience (1-4)         AGR 302       Directed Work Experience – Management Practicum (3)         AGR 320       Applied Learning in Agriculture (.5-8)         ††PLUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (4)         AGR 327       Beef Production (4)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 330       Technical Management of Dairy Cattle (4) (fall only)         ANIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)         AGR 320       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (12/4-280)       6 <sup>6</sup> BIO 111       Cell ceneral Chemistry L30         CHE 111       General Chem						
AGR 302       Directed Work Experience – Management Practicum (3)         AGR 349       Applied Learning in Agriculture (.5-8)         ††PLUS TWO (2) COURSES selected from (animal production elective):         AGR 326       Light Horse Production and Management (3)         AGR 326       Light Horse Production (4)         AGR 327       Beef Production (4)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 330       Technical Management of Dairy Cattle (4) (foll only)         AMIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)         AGR 330       Animal Products (2)         § PUUS FOUR (4) COURSES selected from: (animal science electives)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPORTING COURSE REQUIRIEMENTS (24-30)       6 <sup>6</sup> BIO 111       Cellogy and Evolution (4) $f^{\circ}$ CHE 111       General Chemistry Lab I (1) $f^{\circ}$ CHE 111       General						
AGR 349       Applied Learning in Agriculture (.5-8)         ††PLUS TWO (2) COURSES selected from (animal production elective):         AGR 325       Companion Animal Management (3)         AGR 326       Light Horse Production (4) (fall only)         AGR 327       Beef Production (4) (fall only)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         ANIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)         AGR 330       Technical Management of Dairy Cattle (4) (fall only)         AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30)       General Chemistry Lab I (1)         [ <sup>6</sup> CHE 111       General Chemistry Lab I (1)         [ <sup>6</sup> CHE 112       General Chemistry Lab I (1)         [ <sup>6</sup> CHE 113       General Chemistry Lab I (1) <t< td=""><td></td><td></td></t<>						
AGR 255       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (4)         AGR 327       Beef Production (4) (fall only)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         AMIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-13)         AGR 330       Technical Management of Dairy Cattle (4) (fall only)         AMIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-13)         AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 371       Animal Diseases (4) (fall only)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 377       Livestock Behavior and Welfare (3)         AGR 376       Domestic Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30)       6 <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecolo						
AGR 255       Companion Animal Management (3)         AGR 326       Light Horse Production and Management (4)         AGR 327       Beef Production (4) (fall only)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         AMIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-13)         AGR 330       Technical Management of Dairy Cattle (4) (fall only)         AMIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-13)         AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 371       Animal Diseases (4) (fall only)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 377       Livestock Behavior and Welfare (3)         AGR 376       Domestic Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30)       6 <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecolo	††PLUS TWO (2) C	OURSES selected from (animal production elective):				
AGR 326       Light Horse Production and Management (4)         AGR 327       Beef Production (4) (fall only)         AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 320       Poultry Production and Management (3)         AGR 320       Technical Management of Dairy Cattle (4) (fall only)         AMIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)         AGR 320       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 371       Animal Disease (4) (fall only)         AGR 373       Animal Disease (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTINC COURSE REQUIREMENTS (124-200)       6 <sup>6</sup> BIO 111       General Chemistry Lab L(1) <sup>6</sup> CHE 111       General Chemistry Lab 1(2) <sup>6</sup> CHE 111       General Chemistry Lab L(1) <sup>6</sup> CHE 112       General Chemistry Lab L(1) <sup>6</sup> CHE 113       General Chemistry Lab L(1) <tr< td=""><td></td><td></td></tr<>						
AGR 328       Swine Production (4)         AGR 329       Sheep and Goat Production (4)         AGR 330       Technical Management (3)         AGR 330       Technical Management of Dairy Cattle (4) (fall only)         ANIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)         AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 312       Ecology and Management of Grasslands and Pastures (4)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Nutrition (3) (spring only)         AGR 376       Domestic Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30)       6 <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         [ <sup>6</sup> CHE 111       General Chemistry Lab 1(1)         [ <sup>*</sup> CHE 112       General Chemistry Lab 1(2)         [* CHE 361       Organic Chemistry Lab 1(2)         [* CHE 121       General Chemistry Lab 1(2)         [* CHE 131       Green Chemistry Lab 1(3)         [* CHE 132       General Chemistry Lab		Light Horse Production and Management (4)				
AGR 329       Sheep and Goat Production (4)         AGR 330       Poultry Production and Management (3)         AGR 330       Technical Management of Dairy Cattle (4) (fall only)         ANIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)         AGR 320       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 312       Ecology and Management of Grasslands and Pastures (4)         AGR 312       Cology and Management of Grasslands and Pastures (4)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 376       Domestic Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30)       6         6 BIO 111       Cell and Moleculari Biology (4)         BIO 112       Ecology and Evolution (4)         1 <sup>6</sup> CHE 111       General Chemistry Lab I (1)         1 <sup>e</sup> CHE 112       General Chemistry Lab I (1)         1 <sup>e</sup> CHE 112       General Chemistry Lab I (1)         1 <sup>e</sup> CHE 361       Organic Chemistry Lab I (1)         1 <sup>e</sup> CHE 361						
AGR 332       Poultry Production and Management (3)         AGR 330       Technical Management of Dairy Cattle (4) (fall only)         ANIMAL SCIENCE CONCENTRATION REQUIREMENTS (44-18)         AGR 255 or       Evaluation and Selection of Livestock (3) (spring only)         AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 371       Topics and Laboratories in Animal Sciences (3)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 371       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIRIMENTS (24-30)       6 <sup>6</sup> BIO 111       Celle and Molecular Biology (4)         BIO 112       Ecology and Evolution (4) $\binom{6}{5}$ CKE 111       General Chemistry Lab I (1) $\binom{6}{5}$ CHE 111       General Chemistry Lab I (1) $\binom{6}{5}$ CHE 112       General Chemistry Lab I (1) $\binom{6}{5}$ CHE 113       General Chemistry Lab I (1)						
AGR 380       Technical Management of Dairy Cattle (4) (fall only)         ANIMAL SCIENCE CONCENTRATION REQUIREMENTS (14-18)         AGR 225 or       Evaluation and Selection of Livestock (3) (spring only)         AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 371       Ecology and Management of Grasslands and Pastures (4)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 376       Domestic Requirements (1) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30)       Second Evolution (4)         6° BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         1° CHE 111       General Chemistry Lab I (1)         1° CHE 112       General Chemistry Lab I (1)         1° CHE 113       General Chemistry Lab I (1)         1° CHE 114       General Chemistry Lab I (1)         1° CHE 115       Greanic Chemistry Lab I (1)						
AGR 225 or Animal Products (2)       Evaluation and Selection of Livestock (3) (spring only)         AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 312       Ecology and Management of Grasslands and Pastures (4)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTINC COURSE REQUIREMENTS (24-30)       6 <sup>6</sup> BIO 111       General Chemistry (24-30) <sup>6</sup> BIO 112       Ecology and Evolution (4) <sup>6</sup> CHE 111       General Chemistry [3] <sup>6</sup> CHE 111       General Chemistry I (3) <sup>6</sup> CHE 112       General Chemistry I [3] <sup>6</sup> CHE 113       General Chemistry I [3] <sup>6</sup> CHE 114       General Chemistry I [3] <sup>6</sup> CHE 115       General Chemistry I [3] <sup>6</sup> CHE 116       Organic Chemistry I [3] <sup>6</sup> CHE 117       General Chemistry I [3] <sup>6</sup> CHE 118       General Chemistry I [3]						
AGR 330       Animal Products (2)         § PLUS FOUR (4) COURSES selected from: (animal science electives)         AGR 312       Ecology and Management of Grasslands and Pastures (4)         AGR 371       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTINC COURSE REQUIRIEMENTS (2430) <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         I <sup>6</sup> GRE 111       General Chemistry Lab I (1)         I <sup>e</sup> CHE 112       General Chemistry Lab II (1)         I <sup>e</sup> CHE 113       General Chemistry Lab I (1)         I <sup>e</sup> CHE 114       General Chemistry Lab I (1)         I <sup>e</sup> CHE 115       General Chemistry Lab I (1)         I <sup>e</sup> CHE 116       Organic Chemistry Lab I (1)         I <sup>e</sup> CHE 136       Organic Chemistry Lab I (2)         I <sup>e</sup> CHE 1310       General Chemistry I (3)         I <sup>e</sup> CHE 132       Margin Chemistry I (3)						
<ul> <li>\$ PLUS FOUR (4) COURSES selected from: (animal science electives)</li> <li>AGR 312 Ecology and Management of Grasslands and Pastures (4)</li> <li>AGR 372 Topics and Laboratories in Animal Sciences (3)</li> <li>AGR 373 Animal Diseases (4) (fall only)</li> <li>AGR 374 Genetics of Livestock Improvement (3) (spring only)</li> <li>AGR 375 Reproduction and Artificial Insemination of Domestic Animals (4)</li> <li>AGR 376 Domestic Animal Anatomy (4)</li> <li>AGR 377 Livestock Behavior and Welfare (3)</li> <li>AGR 377 Livestock Behavior and Welfare (3)</li> <li>AGR 421 Animal Nutrition (3) (spring only)</li> <li>SUPPORTING COURSE REQUIREMENTS (24-30)</li> <li><sup>6</sup> BIO 111 Cell and Molecular Biology (4)</li> <li>BIO 112 Ecology and Evolution (4)</li> <li>[<sup>6</sup> CHE 111 General Chemistry Lab 1(1)</li> <li>[<sup>4</sup> CHE 112 General Chemistry Lab 1(2)</li> <li><sup>6</sup> CHE 113 Granic Chemistry Lab 1(2)</li> <li><sup>6</sup> CHE 114 Organic Chemistry Lab 1(2)</li> <li><sup>6</sup> CHE 115 Algebra: Function to Statistical Reasoning (3)</li> <li><sup>*</sup> STA 270 Applied Statistics (4) Bracketed items must be taken concurrently</li> <li>Bracketed items must be taken concurrently</li> <li>PUUS ONE (1) MAT COURSE selected from the following (MAT elective):</li> <li><sup>6</sup> MAT 112B Algebra: Punctions and Matrices (1.5)</li> <li><sup>6</sup> * MAT 1124 Algebra: Functions and Matrices (1.5)</li> <li><sup>6</sup> * MAT 1124 College Algebra (3)</li> <li><sup>6</sup> * MAT 124 Calculus 1(4)</li> <li>* PLUS TWO (2) COURSES selected from the following (science electives):</li> <li>AGR 374 of Genetics (4)</li> </ul>						
AGR 312       Ecology and Management of Grasslands and Pastures (4)         AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30) <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         [ <sup>6</sup> CHE 111       General Chemistry Lab 1(1)         [ <sup>6</sup> CHE 112       General Chemistry Lab 1(2)         [ <sup>6</sup> CHE 112       General Chemistry Lab 1(1)         [ <sup>8</sup> CHE 121       General Chemistry Lab 1(2)         [ <sup>8</sup> CHE 132       Granic Chemistry Lab 1(2)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab 1(2)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab 1(2)						
AGR 372       Topics and Laboratories in Animal Sciences (3)         AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTINC COURSE REQUISIEMENTS (24-30)         6 BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         6 CHE 111       General Chemistry Lab I (1)         6 * CHE 112       General Chemistry Lab I (1)         7 * CHE 112       General Chemistry Lab II (1)         8 * CHE 112       General Chemistry Lab II (1)         8 * CHE 361       Organic Chemistry Lab II (1)         8 * CHE 361       Organic Chemistry Lab II (1)         8 * CHE 361       Organic Chemistry Lab II (1)         8 * CHE 312       General Chemistry Lab II (1)         8 * CHE 312       General Chemistry Lab II (2)         8 * CHE 312       General Chemistry Lab II (2)         8 * CHE 312       General Chemistry Lab II (2)         8 * CHE 312       General Chemistry Lab II (2) <td< td=""><td></td><td></td></td<>						
AGR 373       Animal Diseases (4) (fall only)         AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 427       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIRENTS (2420) <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4) <sup>6</sup> GCHE 111       General Chemistry I (3) <sup>6</sup> CHE 112       General Chemistry Lab I (1) <sup>6</sup> CHE 113       General Chemistry Lab I (1) <sup>6</sup> CHE 114       General Chemistry Lab I (1) <sup>6</sup> CHE 115       General Chemistry Lab I (2) <sup>6</sup> CHE 116       Organic Chemistry Lab I (2) <sup>7</sup> CHE 136       Organic Chemistry Lab I (2) <sup>8</sup> CHE 361       Organic Chemistry Lab I (2) <sup>6</sup> MAT 124       <						
AGR 374       Genetics of Livestock Improvement (3) (spring only)         AGR 375       Reproduction and Artificial Insemination of Domestic         Animals (4)       AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animals Nutrition (3) (spring only)         SUPPORTING COURSE REQUIRTMENTS (24-30) <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         [ <sup>6</sup> CHE 111       General Chemistry 1(3)         {* CHE 112       General Chemistry Lab 1(1)         {* CHE 113       General Chemistry I (3)         {* CHE 1361       Organic Chemistry I (3)         {* CHE 361       Organic Chemistry I (3)         {* CHE 362       Ordynomials (1.5)						
Animals (4)         AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIRTMENTS (24-30) <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4) $\begin{bmatrix} ^6$ CHE 111       General Chemistry Lab (1) $\begin{bmatrix} ^6$ CHE 112       General Chemistry Lab I (1) $\begin{bmatrix} ^*$ CHE 112       General Chemistry I (3) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (1) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (1) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (1) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (1) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (1) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (2) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (2) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (2) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (2) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (2) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (2) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (2) $\begin{bmatrix} ^*$ CHE 361       Organic Chemistry Lab I (2)	AGR 374					
AGR 376       Domestic Animal Anatomy (4)         AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30) <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         [ <sup>6</sup> CHE 111       General Chemistry I (3)         CHE 112       General Chemistry Lab 1 (1)         { <sup>8</sup> CHE 112       General Chemistry Lab I (1)         { <sup>8</sup> CHE 112       General Chemistry Lab I (1)         { <sup>8</sup> CHE 112       General Chemistry Lab I (1)         { <sup>8</sup> CHE 112       General Chemistry Lab I (1)         { <sup>8</sup> CHE 113       General Chemistry Lab I (1)         { <sup>8</sup> CHE 114       General Chemistry Lab I (1)         { <sup>8</sup> CHE 115       General Chemistry Lab I (1)         { <sup>8</sup> CHE 116       Organic Chemistry Lab I (1)         { <sup>8</sup> CHE 136       Organic Chemistry Lab I (1)         { <sup>8</sup> CHE 136       Organic Chemistry Lab I (1)         { <sup>8</sup> CHE 136       Organic Chemistry Lab I (1)         { <sup>8</sup> CHE 136       Organic Chemistry Lab I (1)         { <sup>8</sup> CHE 136       Organic Chemistry [3)         Bracketed items must be taken concurrently       Bracketed items must be taken concurrently         PLUS ONE (1) MAT COURSE sele	AGR 375	-				
AGR 377       Livestock Behavior and Welfare (3)         AGR 421       Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30) <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         [ <sup>6</sup> CHE 111       General Chemistry Lab I (1)         [ <sup>6</sup> CHE 112       General Chemistry Lab I (1)         [ <sup>8</sup> CHE 112       General Chemistry Lab I (1)         [ <sup>8</sup> CHE 112       General Chemistry Lab I (1)         [ <sup>8</sup> CHE 112       General Chemistry Lab I (1)         [ <sup>8</sup> CHE 112       General Chemistry Lab I (1)         [ <sup>8</sup> CHE 112       General Chemistry Lab I (1)         [ <sup>8</sup> CHE 112       General Chemistry I (3)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1)         [ <sup>8</sup> CHE 361       Organic Chemistry Lab I (1) </td <td>ACD 276</td> <td></td>	ACD 276					
AGR 421       Animal Nutrition (3) (spring only)         SUPPORTING COURSE REQUIREMENTS (24-30) <sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4) <sup>6</sup> CHE 111       General Chemistry Lab I (1) <sup>6</sup> CHE 111       General Chemistry Lab I (1) <sup>6</sup> CHE 112       General Chemistry Lab I (1) <sup>6</sup> CHE 112       General Chemistry Lab II (1) <sup>6</sup> CHE 112       General Chemistry Lab II (1) <sup>6</sup> CHE 112       General Chemistry Lab II (1) <sup>6</sup> CHE 361       Organic Chemistry Lab I (1) <sup>6</sup> ECO 120       Economic Reasoning and Issues (3)         STA 215 or       Introduction to Statistical Reasoning (3) <sup>8</sup> TA 270       Applied Statistics (4)         Bracketed items must be token concurrently         PLUS ONE (1) MAT COURSE selected from the following (MAT elective): <sup>6</sup> MAT 112B       Algebra: Polynomials (1.5) <sup>6</sup> * MAT 112C       Trigonometry (3) <sup>6</sup> * MAT 122       Precalculus Mathematics (5) <sup>6</sup> * MAT 211       Applied Calculus (3) <td></td> <td></td>						
<sup>6</sup> BIO 111       Cell and Molecular Biology (4)         BIO 112       Ecology and Evolution (4)         [ <sup>6</sup> CHE 111       General Chemistry I (3)         (CHE 1111       General Chemistry Lab (1)         {* CHE 112       General Chemistry I (3)         {* CHE 113       General Chemistry I (3)         {* CHE 114       General Chemistry I (3)         {* CHE 115       General Chemistry I (3)         {* CHE 116       Organic Chemistry I (3)         {* CHE 361       Organic Chemistry Lab I (1)         {* CHE 361       Organic Chemistry Lab I (1)         {* CHE 361       Organic Chemistry I (3)         {* CHE 361       Organic Chemistry Lab I (1)         {* CHE 361       Organic Chemistry I (3)         {* CHE 361       Organic Chemistry Lab I (1)         {* CD 20       Economic Reasoning and Issues (3)         STA 215 or       Introduction to Statistical Reasoning (3)         * STA 270       Applied Statistics (4)         Brocketed items must be taken concurrently         PLUS ONE (1) MAT COURSE selected from the following (MAT elective): <sup>6</sup> MAT 1128       Algebra: Functions and Matrices (1.5) <sup>6</sup> * MAT 120       Trigonometry (3) <sup>6</sup> * MAT 121       Applied Calculus (3) <sup>6</sup> * MAT						
BIO 112       Ecology and Evolution (4)         1 <sup>G</sup> CHE 111       General Chemistry I (3)         CHE 111       General Chemistry I bab I (1)         1 <sup>G</sup> CHE 112       General Chemistry I bab I (1)         1 <sup>G</sup> CHE 112       General Chemistry I bab I (1)         1 <sup>G</sup> CHE 112       General Chemistry I bab I (1)         1 <sup>G</sup> CHE 112       General Chemistry I bab I (1)         1 <sup>G</sup> CHE 112       General Chemistry I bab I (1)         1 <sup>G</sup> CHE 112       General Chemistry I bab I (1)         1 <sup>G</sup> CHE 112       General Chemistry I bab I (1)         1 <sup>G</sup> CHE 361       Organic Chemistry I bab I (1)         6 <sup>G</sup> ECO 120       Economic Reasoning and Issues (3)         STA 215 or       Introduction to Statistical Reasoning (3)         * STA 270       Applied Statistics (4)         Brocketed items must be taken concurrently         PLUS ONE (1) MAT COURSE selected from the following (MAT elective):         6 <sup>G</sup> MAT 112B       Algebra: Polynomials (1.5)         6 <sup>G</sup> MAT 112B       Algebra: Polynomials (1.5)         6 <sup>G</sup> MAT 112B       Algebra: Polynomials (1.5)         6 <sup>G</sup> MAT 112C       Trigonometry (3)         6 <sup>G</sup> MAT 122       Precalculus Mathematics (5)         6 <sup>G</sup> MAT 211       Applied Calculus (3)         6 <sup>G</sup> MAT 224       Calculus (14)	SUPPORTING COURSE REQUIREMENTS (24-30)					
<sup>6</sup> CHE 111 <sup>6</sup> General Chemistry I (3) <sup>7</sup> CHE 111 <sup>6</sup> General Chemistry Lab II (1) <sup>8</sup> CHE 112 <sup>6</sup> General Chemistry Lab II (1) <sup>8</sup> CHE 112 <sup>6</sup> General Chemistry Lab II (1) <sup>8</sup> CHE 112 <sup>6</sup> General Chemistry Lab II (1) <sup>8</sup> CHE 361 <sup>6</sup> Organic Chemistry Lab II (1) <sup>6</sup> ECO 120 <sup>6</sup> ECO 120 <sup>6</sup> ECO 120 <sup>6</sup> Chemistry Lab II (1) <sup>7</sup> STA 270 <sup>7</sup> Applied Statistics (4) <sup>7</sup> Bracketed items must be taken concurrently <sup>9</sup> PULSO NE (1) MAT COURSE selected from the following (MAT elective): <sup>6</sup> MAT 1128 <sup>6</sup> Algebra: Folynomials (1.5) <sup>6</sup> MAT 1124 <sup>6</sup> AMAT 122 <sup>6</sup> Precalculus Mathematics (5) <sup>6</sup> * MAT 121 <sup>6</sup> Applied Calculus (3) <sup>6</sup> * MAT 234 <sup>6</sup> Calculus 1(4) <sup>4</sup> PLUS TWO (2) COURSES selected from the following (science electives):         AGR 374 or <sup>6</sup> Genetics of Livestock Improvement (3) (spring only) <sup>*</sup> BIO 315 <sup>6</sup> Genetics (4) <sup>6</sup> <sup>6</sup> Stater <sup>6</sup>						
CHE 111L       General Chemistry Lab I (1)         {* CHE 112L       General Chemistry II (3)         * CHE 112L       General Chemistry Lab II (1)         {* CHE 361       Organic Chemistry Lab I (1)         {* CHE 361L       Organic Chemistry Lab I (1)         {* CD120       Economic Reasoning and Issues (3)         STA 215 or       Introduction to Statistical Reasoning (3)         * STA 270       Applied Statistics (4)         Bracketed items must be taken concurrently         PUS ONE (1) MAT COURSE selected from the following (MAT elective):         {* MAT 112B       Algebra: Polynomials (1.5)         {* MAT 114       College Algebra (3)         {* MAT 122       Precalculus Mathematics (5)         {* MAT 234       Calculus (3)         {* MAT 234       Calculus (4)         * PLUS TWO (2) COURSE selected from the following (science electives):         AGR 374 or       Genetics of Livestock Improvement (3) (spring only)         * BIO 315       Genetics (4)						
* CHE 112L       General Chemistry Lab II (1)         * CHE 361       Organic Chemistry Lab II (1)         * CHE 361       Organic Chemistry Lab II (1)         * CHE 361       Organic Chemistry Lab II (1)         * ECD 120       Economic Reasoning and Issues (3)         STA 215 or       Introduction to Statistical Reasoning (3)         * STA 270       Applied Statistics (4)         Bracketed items must be taken concurrently         PLUS ONE (1) MAT COURSE selected from the following (MAT elective):         6 MAT 1128       Algebra: Polynomials (1.5)         6 * MAT 1128       Algebra: Polynomials (1.5)         6 * MAT 112       Trigonometry (3)         6 * MAT 120       Trigonometry (3)         6 * MAT 211       Applied Calculus (3)         6 * MAT 211       Applied Calculus (3)         6 * MAT 234       Calculus (4) <b>4</b> PULS TWO (2) COURSES selected from the following (science electives):         AGR 374 or       Genetics of Livestock Improvement (3) (spring only)         * BIO 315       Genetics (4)						
<sup>*</sup> CHE 361        Organic Chemistry I (3) <sup>*</sup> CHE 361        Organic Chemistry I (3) <sup>6</sup> ECO 120        Economic Reasoning and Issues (3) <sup>5</sup> TA 215 or        Introduction to Statistical Reasoning (3) <sup>*</sup> STA 270        Applied Statistics (4) <sup>B</sup> Bracketed items must be taken concurrently        PULUS ONE (1) MAT COURSE selected from the following (MAT elective): <sup>6</sup> MAT 1128        Algebra: Polynomials (1.5) <sup>6</sup> MAT 1128        Algebra: Folynomials (1.5) <sup>6</sup> MAT 112        Trigonometry (3) <sup>6</sup> * MAT 122        Precalculus Mathematics (5) <sup>6</sup> * MAT 234        Calculus (3) <sup>6</sup> * MAT 234        Calculus 1(4)             * PLUS TWO (2) COURSES selected from the following (science electives):             AGR 374 or        Genetics of Livestock Improvement (3) (spring only)             * BIO 315        Genetics (4)						
1 * CHE 361L       Organic Chemistry Lab I (1) <sup>6</sup> ECO 120       Economic Reasoning and Issues (3)         STA 215 or       Introduction to Statistical Reasoning (3)         * STA 270       Applied Statistics (4)         Bracketed items must be taken concurrently         PLUS ONE (1) MAT COURSE selected from the following (MAT elective): <sup>6</sup> MAT 112A ond       Algebra: Polynomials (1.5) <sup>6</sup> MAT 112B       Algebra: Functions and Matrices (1.5) <sup>6</sup> * MAT 114       College Algebra (3) <sup>6</sup> * MAT 122       Precalculus Mathematics (5) <sup>6</sup> * MAT 211       Applied Calculus (3) <sup>6</sup> * MAT 234       Calculus 1(4)         * PLUS TWO (2) COURSES selected from the following (science electives):         AGR 374 or       Genetics of Livestock Improvement (3) (spring only)         * BIO 315       Genetics (4)						
<sup>6</sup> ECO 120     Economic Reasoning and issues (3)       STA 215 or * STA 270     Introduction to Statistical Reasoning (3)       * STA 270     Applied Statistics (4)       Bracketed items must be taken concurrently       PLUS ONE (1) MAT COURSE selected from the following (MAT elective): <sup>6</sup> MAT 1128     Algebra: Polynomials (1.5) <sup>6</sup> MAT 1128     Algebra: Functions and Matrices (1.5) <sup>6</sup> * MAT 114     College Algebra (3) <sup>6</sup> * MAT 120     Trigonometry (3) <sup>6</sup> * MAT 121     Applied Calculus (3) <sup>6</sup> * MAT 211     Applied Calculus (3) <sup>6</sup> * MAT 224     Calculus (14) <b>4</b> PLUS TWO (2) COURSES selected from the following (science electives):       AGR 374 or     Genetics of Livestock Improvement (3) (spring only)       * BIO 315     Genetics (4)						
STA 215 or * STA 270       Introduction to Statistical Reasoning (3)         Applied Statistics (4)       Bracketed items must be taken concurrently         PLUS ONE (1) MAT COURSE selected from the following (MAT elective):       6 <sup>6</sup> MAT 112A and       Algebra: Polynomials (1.5) <sup>6</sup> MAT 112B       Algebra: Functions and Matrices (1.5) <sup>6</sup> * MAT 112       College Algebra (3) <sup>6</sup> * MAT 120       Trigonometry (3) <sup>6</sup> * MAT 121       Applied Calculus (3) <sup>6</sup> * MAT 211       Applied Calculus (3) <sup>6</sup> * MAT 22       Precalculus I (4) <b>4</b> PLUS TWO (2) COURSES selected from the following (science electives):         AGR 374 or       Genetics of Livestock Improvement (3) (spring only) <b>*</b> BIO 315       Genetics (4)						
* STA 270     Applied Statistics (4) Bracketed items must be taken concurrently       PLUS ONE (1) MAT COURSE selected from the following (MAT elective): <sup>6</sup> MAT 1128     Algebra: Polynomials (1.5) <sup>6</sup> MAT 1128     Algebra: Folynomials (1.5) <sup>6</sup> MAT 1128     Algebra: Folynomials (1.5) <sup>6</sup> MAT 1120     Trigonometry (3) <sup>6</sup> * MAT 122     Precalculus Mathematics (5) <sup>6</sup> * MAT 211     Applied Calculus (3) <sup>6</sup> * MAT 234     Calculus 1(4) <b>*</b> PLUS TWO (2) COURSES selected from the following (science electives):       AGR 374 or     Genetics of Livestock Improvement (3) (spring only) <b>*</b> BIO 315     Genetics (4)						
PLUS ONE (1) MAT COURSE selected from the following (MAT elective): <sup>6</sup> MAT 112A and       Algebra: Polynomials (1.5) <sup>6</sup> MAT 112B       Algebra: Functions and Matrices (1.5) <sup>6</sup> MAT 112       Algebra: Functions and Matrices (1.5) <sup>6</sup> * MAT 114       College Algebra (3) <sup>6</sup> * MAT 120       Trigonometry (3) <sup>6</sup> * MAT 121       Applied Calculus (Mathematics (5) <sup>6</sup> * MAT 211       Applied Calculus (3) <sup>6</sup> * MAT 234       Calculus I (4)         * PULS TWO (2) COURSES selected from the following (science electives):         AGR 374 or       Genetics of Livestock Improvement (3) (spring only)         * BIO 315       Genetics (4)		Applied Statistics (4)				
<sup>G</sup> MAT 112A and       Algebra: Polynomials (1.5) <sup>G</sup> MAT 112B       Algebra: Functions and Matrices (1.5) <sup>6</sup> * MAT 114       College Algebra (3) <sup>6</sup> * MAT 120       Trigonometry (3) <sup>6</sup> * MAT 121       Precalculus Mathematics (5) <sup>6</sup> * MAT 211       Applied Calculus (3) <sup>6</sup> * MAT 22       Precalculus I (4)         * PULS TWO (2) COURSES selected from the following (science electives):         AGR 374 or       Genetics of Livestock Improvement (3) (spring only)         * BIO 315       Genetics (4)						
<sup>6</sup> MAT 112B     Algebra: Functions and Matrices (1.5) <sup>6</sup> * MAT 114     College Algebra (3) <sup>6</sup> * MAT 120     Trigonometry (3) <sup>6</sup> * MAT 211     Applied Calculus Mathematics (5) <sup>6</sup> * MAT 211     Applied Calculus (3) <sup>6</sup> * MAT 234     Calculus 1 (4) <b>*</b> PLUS TWO (2) COURSES selected from the following (science electives):       AGR 374 or     Genetics of Livestock Improvement (3) (spring only) <b>*</b> BIO 315     Genetics (4)						
<sup>6</sup> * MAT 120     Trigonometry (3) <sup>6</sup> * MAT 122     Precalculus Mathematics (5) <sup>6</sup> * MAT 211     Applied Calculus (3) <sup>6</sup> * MAT 223     Calculus I (4)       * PLUS TWO (2) COURSES selected from the following (science electives):       AGR 374 or     Genetics of Livestock Improvement (3) (spring only)       * BIO 315     Genetics (4)	<sup>G</sup> MAT 112B					
G* MAT 122     Precalculus Mathematics (5)       G* MAT 211     Applied Calculus (3)       G* MAT 234     Calculus I (4)       + PLUS TWO (2) COURSES selected from the following (science electives):       AGR 374 or     Genetics of Livestock Improvement (3) (spring only)       * BIO 315     Genetics (4)						
<sup>6</sup> * MAT 211     Applied Calculus (3) <sup>6</sup> * MAT 234     Calculus I (4)       * PLUS TWO (2) COURSES selected from the following (science electives):       AGR 374 or     Genetics of Livestock Improvement (3) (spring only)       * BIO 315     Genetics (4)						
G * MAT 234     Calculus I (4)       * PLUS TWO (2) COURSES selected from the following (science electives):       AGR 374 or * BIO 315     Genetics of Livestock Improvement (3) (spring only)						
* PLUS TWO (2) COURSES selected from the following (science electives):           AGR 374 or * BIO 315         Genetics of Livestock Improvement (3) (spring only)						
AGR 374 <u>or</u> Genetics of Livestock Improvement (3) (spring only) * BIO 315 Genetics (4)						
	AGR 374 <u>or</u>	Genetics of Livestock Improvement (3) (spring only)				
* BIO 320 Principles of Microbiology (4)						
* BIO 331       Cell Biology (3) (fall only)         * BIO 348       Vertebrate Physiology (3)						
* BIO 348 Vertebrate Physiology (3) * BIO 546 Histology (4) (spring only)						
CHE 362 <u>and</u> Organic Chemistry II (3)						
CHE 362L Organic Chemistry Lab II (1)						
* CHE 430 Biochemistry of Macromolecules (3)						
PHY 131 College Physics I (5)						
* PHY 132 College Physics II (5) FREE ELECTIVES (3-13)						
<sup>6</sup> Denotes that 3 credit hours from this course are/can be applied to fulfill a Gen. Ed.						