



Advising Worksheet for Animal Science Core Requirements



Effective 2016-2017 Bulletin - 120 hrs

College Integrative Course (3 Hr)	MET	HR	ACE
SCIL 101 Science and Decision-Making for a Complex World (B)		3	

Department Req (16 Hr)	MET	HR	ACE
ASCI 095 Animal Science Major Orientation Seminar (F)		0	
ASCI 100 Fund of Animal Biology w/lab (B)		4	
ASCI 201 Professional Development for Careers in Animal Science (S)		1	
ASCI 320 Animal Nutrition & Feeding (B)		3	
ASCI 491 Animal Science Seminar (B)		1	
Capstone Course, Select From: ASCI 451 Livestock Management on Range & Pasture (AGRO 445/RNGE 445 - (F)), ASCI 485 Animal Systems Analysis (S) , ASCI 486 Animal Biological Systems (F)		3	10
Natural Sciences (8 Hr)	MET	HR	ACE
AGRO 315 Genetics or BIOS 206 General Genetics. NOTE: BIOS 206 requires both LIFE 120 & LIFE 120L and LIFE 121 & LIFE 121L as prerequisites (B)		4	4
BIOS 101 & BIOS General Biology & Lab (B)		4	
LIFE 120 & LIFE 120L Fundamentals of Biology I & Lab (B)		4	
NOTE: Students enrolled in the Biology or Veterinary Option are required to take LIFE 120 & LIFE 120L			

F=Fall Only

S=Spring Only

B=Both Fall & Spring

SS=Summer Session

TBA: To be announced by semester

NOTE: Course offerings are subject to change

by Department offering the course

Mathematics and Statistics (5-10 Hr)	MET	HR	ACE
MATH 102 Trigonometry (2 cr) & STAT 218 Introduction to Statistics (3 cr); plus one from MSYM 109 Physical Principles in Agriculture & Life Sciences (4 cr) or PHYS 141 Elementary General Physics I (5 cr) or PHYS 151 Elements of Physics (4 cr), MATH 104 Applied Calculus (3 cr) & STAT 218 Introduction to Statistics (3 cr), MATH 106 Calculus 1 (5 cr)			3
NOTE: Proficiency at the college algebra level must be demonstrated either by a placement exam or through coursework. If MATH 103 is taken instead of MATH 102, only 2 credit hours can be counted toward this requirement. Note: Students in the Veterinary Animal Sciences Option must take PHYS 141 as a required course for admittance to the ISU CVM			
Communications (9 cr)	MET	HR	ACE
ORAL Select from: ALEC 102 Interpersonal Skills for Leadership, COMM 101 Comm in the 21st Century, COMM 209 Public Speaking, COMM 210 Communicating in Small Groups, COMM 215 Visual Comm, COMM 283 Interpersonal Comm, COMM 286 Business & Prof Comm, JGEN 300 Technical Comm, MRKT 257 Sales Comm, TMFD 121 Visual Comm and Presentation		3	2
WRITTEN: Select from ENGL 150 Writing & Inquiry, ENGL 151 Writing & Argument, ENGL 254 Writing & Communities, JGEN 120 Basic Business Comm, JGEN 200 Technical Comm I, JGEN 300 Technical Comm II		3	1
COMMUNICATIONS AND INTERPERSONAL SKILLS: Select from any courses from the above listings not used to fulfill the ACE 1 or ACE 2 requirements. ALEC 202, ALEC 207 (ADPR 207), ALEC 302, ALEC 305, ALEC 350, ALEC 480, COMM 212, COMM 325, JGEN 103, JGEN 220, MNGT 311, MNGT 365		3	
Economics, Humanities & Social Sciences (15 Hr)	MET	HR	ACE
ECON 200 or ECON 211 or ECON 212 or AECN 141		3	
ACE Courses, select one course each from ACE outcomes 5, 7, 8, and 9		3	5
		3	7
		3	8
		3	9

Animal Science-Meat Science Option

Departmental Requirements (19-20)	MET	HR
ASCI 210 Animal Products (B)		3
ASCI 240 Basic Anatomy & Physiology of Domestic Animals (S) OR ASCI 340 Animal Physiological Systems (F)		4
ASCI 310 Fresh Meats (F)		3
ASCI 315 Animal Growth & Development (F) OR ASCI 341 Physiology & Management of Reproduction (F)		3-4
ASCI 410 Processed Meats (S)		3
ASCI 411 HACCP & Food Safety Systems for the Food Industry (S)		3
Natural Sciences (11-16)	MET	HR
<i>Chemistry 8-12, Select from either of the series</i>		
Series I: CHEM 106 Chemistry in Context II and CHEM 105 Chemistry in Context I (F) or CHEM 109 General Chemistry I (S) NOTE: Chemistry Series I does not provide adequate preparation for advanced chemistry or graduate school within the life sciences. If you desire this advanced training, Series II is recommended		8
(ALL)Series II: CHEM 109 & CHEM 110 General Chemistry I & II AND CHEM 251 & CHEM 253 Organic Chemistry I & Lab (ALL)		12
BIOS 312 Microbiology (3) (ALL) OR VBMS 303 Principles & Prevention of Livestock Diseases (3) (S) OR BIOS 111 The Biology of Microorganisms (4) (B)		3-4
Supporting Courses (9)	MET	HR
ASCI or FDST at 200 level or above; <i>suggested courses</i>		3
ASCI 200 Animal & Carcass Evaluation (F)		3
ASCI 213 Meat Specifications & Procurement (NUTR 213) (S)		3
FDST 205 Food Composition & Analysis		3
ASCI or FDST at 300/400 level or above; <i>suggested courses</i>		6
ASCI 300A, 300B or ASCI 300D (only one allowed for credit here)		1
ASCI 311B Meat Industry Study Tour (F)		2
ASCI 419 Meat Investigations (F)		1-5
FDST 301 Chemistry of Food (TBA)		3
FDST 363 Heat & Mass Transfer (TBA)		3
FDST 372 Food Safety & Sanitation (NUTR 372) (TBA)		3
FDST 403 Food Quality Assurance (TBA)		3
FDST 405 Food Microbiology (BIOS 445) (TBA)		3
FDST 406 Food Microbiology Lab (BIOS 446) (TBA)		2
FDST 460 Food Product Development Concepts (TBA)		3

Business Courses (3-6)	Met	HR
If student completes CHEM Series I: Select two courses from the "Business Courses" category listed in the Animal Science Business Option in the Undergraduate Bulletin (6); If student completes CHEM Series II: Select one courses from the "Business Courses" category (3)		
NOTE: Experiential learning courses suggested from the following: ASCI 300A, ASCI 300D, ASCI 311B, ASCI 395A (meat section), ASCI 400A, ASCI 419		
ANIMAL SCIENCE EXPERIENTIAL LEARNING		
Internship, Extension, Research or Teaching Experience	MET	
ASCI 395A Industry Experiences (ALL)		
ASCI 395B Extension & Services Experiences (ALL)		
ASCI 395D Research Experiences (ALL)		
ASCI 395E Undergraduate Teaching Experience (ALL)		
ASCI 419 Meat Investigations (FDST 419) (S)		
ASCI 490A Beef Feedlot Management (F/SS)		
ASCI 499H Honors Thesis (ALL)		
GRAS 490 Intern Exp in Grazing Livestock Systems (F, SS)		
AECN 495A Internship in Agri Financing & Banking (TBA)		
ASCI 495B Intern in Food Products Marketing Mgmt (TBA)		
AECN 495C Internship in Agricultural & Public Policy (TBA)		
EAEP 395 Agribusiness Entrepreneurship Internship (TBA)		
Industry Study Tours	MET	
ASCI 311A Equine Industry Study Tour (S)		
ASCI 311B Meat Industry Study Tour (F)		
ASCI 311D Pork Industry Study Tour (S)		
ASCI 311E Beef Industry Study Tour (S)		
AGRI 310 study Tours in International Agriculture (ALL)		
Animal & Meat Evaluation Experience	MET	
ASCI 300A Meat Evaluation & Judging (B)		
ASCI 300B Livestock Evaluation & Judging (F)		
ASCI 300D Meat Animal Evaluation (B)		
ASCI 300E Horse Evaluation & Judging (B)		
ASCI 400A Advanced Meat Grading & Evaluation (F)		
ASCI 400B Advanced Livestock Evaluation & Judging (F)		
ASCI 400E Advanced Horse Evaluation & Judging (F)		
ASCI 361 Equestrian Team Horsemanship/ Equitation (F)		
ASCI 456 Beef Cattle Merchandising (S)		
ASCI 481 Beef Industry Scholars-Beef Summit (F)		
ASCI 482 Beef Industry Scholars-Nat'l Beef Industry Policy (AECN 482) (S, ODD YEARS)		
AGRI 388 Employment Seminar (F)		
AGRI 389 Agricultural Concerns Seminar (TBA)		