



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-Animal Biology and Biotechnology Option

Departmental Requirements (25)	MET	HR
ASCI 210 Animal Products (B) OR ASCI 315 Animal Growth & Development (S)		3
ASCI 340 Animal Physiological Systems (F)		4
ASCI 341 Physiology & Management of Reproduction (F)		4
<i>Select advanced courses from :</i> (14)		
ASCI 421 Advanced Animal Nutrition (F)		3
ASCI 431 Advanced Animal Breeding (S)		3
ASCI 441 New Techniques in Repro Biology (S)		3
ASCI 432 Genome Analysis (S)		3
ASCI 442 Endocrinology (BIOS 442) (F)		3
ASCI 443 Physiology of Animal Cells & Tissues (S)		3
BIOC 432 Metabolism & Biological Information (BIOS 432/CHEM 432) (B)		3
BIOC 433 Biochem Lab (BIOS 433/CHEM 433) (B)		2
BIOC 437 Research Techniques in Biochemistry BIOS 437) (S)		4
BIOC 442 Computational Biology (STAT 442) (TBA)		3
BIOS 420 Molecular Genetics (MBIO 420) (TBA)		3
BIOS 440 Microbial Physiology (MBIO 440) (TBA)		3
BIOS 443 Immunology (MBIO 443) (TBA)		3
Natural Science (26)	MET	HR
CHEM 109 General Chemistry I (B)		4
CHEM 110 General Chemistry II (B)		4
CHEM 251 & 253 Organic Chemistry I & Lab (B)		4
CHEM 252 Organic Chemistry II (B)		3
BIOC 431 Structure & Metabolism (BIOS 431/CHEM 431) (B)		3
LIFE 121 & LIFE 121L Fundamentals of Biology II & Lab (B)		4
BIOS 312 & BIOS 314 Microbiology & Lab (ALL)		4

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 Internship Experience in Grazing Livestock Systems (F,SS)	
AECN 495A Internship in Agricultural Financing & Banking (TBA)	
ASCI 495B Internship in Food Products Marketing Management (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)	