

Submit originals (including syllabus) and one copy and electronic copy to the **Faculty Senate Office**
 See <http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/> for a complete description of the rules governing curriculum & course changes.

CHANGE COURSE (MAJOR) and DROP COURSE PROPOSAL
 Attach a syllabus, except if dropping a course.

SUBMITTED BY:

Department	Agriculture and Horticulture	College/School	SNRE
Prepared by	Milan Shipka	Phone	7429
Email Contact	mpshipka@alaska.edu	Faculty Contact	Milan Shipka

1. COURSE IDENTIFICATION: As the course now exists.

Dept	NRM	Course #	320	No. of Credits	3
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COURSE TITLE	Animal Science
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2. ACTION DESIRED: Check the changes to be made to the existing course.

Change Course	<input checked="" type="checkbox"/>	If Change, indicate below what is changing.	Drop Course	<input type="checkbox"/>
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NUMBER	X 320 to 220	TITLE	X Intro ducti on to Ani mal Scien ce	DESCRIPTION	
PREREQUISITES*	X New prereq NRM 210	FREQUENCY OF OFFERING			X Every spring semester TTH 8:00- 9:30

*Prerequisites will be required before a student is allowed to enroll in the course.

CREDITS (including credit distribution)		COURSE CLASSIFICATION	
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ADD A STACKED LEVEL (400/600) Include syllabi.		Dept.		Course #	
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How will the two course levels differ from each other? How will each be taught at the appropriate level?:

Stacked course applications are reviewed by the (Undergraduate) Curricular Review Committee and by the Graduate Academic and Advising Committee. Creating two different syllabi—undergraduate and graduate versions—will help emphasize the different qualities of what are supposed to be two different courses. The committees will determine: 1) whether the two versions are sufficiently different (i.e. is there undergraduate and graduate level content being offered); 2) are undergraduates being overtaxed?; 3) are graduate students being undertaxed? In this context, the committees are looking out for the interests of the students taking the course. Typically, if either committee has qualms, they both do. More info online - see URL at top of this page.

ADD NEW CROSS-LISTING		Dept. & No.	Requires approval of both departments and deans involved. Add lines at end of form for additional signatures.
STOP EXISTING CROSS-LISTING		Dept. & No.	Requires notification of other department(s) and mutual agreement. Attach copy of email or memo.
OTHER (specify)			

3. **COURSE FORMAT**

NOTE: Course hours may not be compressed into fewer than three days per credit. Any course compressed into fewer than six weeks must be approved by the college or school's curriculum council and the appropriate Faculty Senate curriculum committee. Furthermore, **any core course compressed to less than six weeks must be approved by the Core Review Committee.**

COURSE FORMAT: (check <u>all</u> that apply)	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input checked="" type="checkbox"/> 6 weeks to full semester
OTHER FORMAT (specify all that apply)						
Mode of delivery (specify lecture, field trips, labs, etc.)	Lecture and web-based lab assignment					

4. **COURSE CLASSIFICATIONS:** (undergraduate courses only. Use approved criteria found in Chapter 12 of the curriculum manual. If justification is needed, attach separate sheet.)

H = Humanities	<input type="checkbox"/>	S = Social Sciences	<input type="checkbox"/>
Will this course be used to fulfill a requirement for the baccalaureate core?	YES	<input type="checkbox"/>	NO
	<input type="checkbox"/>		X
IF YES*, check which core requirements it could be used to fulfill:			
O = Oral Intensive, *Format 6 also submitted	<input type="checkbox"/>	W = Writing Intensive, *Format 7 submitted	<input type="checkbox"/>
	<input type="checkbox"/>	X = Baccalaureate Core	<input type="checkbox"/>

4.A **Is course content related to northern, arctic or circumpolar studies? If yes, a "snowflake" symbol will be added in the printed Catalog, and flagged in Banner.**

YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
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5. **COURSE REPEATABILITY:**

Is this course repeatable for credit?	YES	<input type="checkbox"/>	NO	<input checked="" type="checkbox"/>
Justification: Indicate why the course can be repeated (for example, the course follows a different theme each time).				
How many times may the course be repeated for credit?	<input type="checkbox"/>	TIMES		
If the course can be repeated with variable credit, what is the maximum number of credit hours that may be earned for this course?	<input type="checkbox"/>	CREDITS		

6. **COMPLETE CATALOG DESCRIPTION** including dept., number, title, credits, credit distribution, cross-listings and/or stacking, clearly showing the changes you want made. (Underline new wording ~~strike through old wording~~ and use complete catalog format including dept., number, title, credits and cross-listed and stacked.)

Example of a complete description:

PS F450 Comparative ~~Aberiginal~~ Indigenous Rights and Policies (s)
3 Credits
Offered As Demand Warrants
~~Case study~~ Comparative approach in ~~assessing Aberiginal~~ to analyzing Indigenous rights and policies in different nation-state systems. ~~Seven Aberiginal situations~~ Multiple countries and specific policy developments examined for factors promoting or limiting self-determination. Prerequisites: Upper division standing or permission of instructor. (Cross-listed with ANS F450.) (3+0)

NRM F320	<u>Introduction to Animal Science</u>
3 Credits	Offered Introduction to the various disciplines that form the study of animal science. Topics include animal nutrition, physiology of reproduction and lactation, genetics and animal breeding, animal behavior, environmental physiology, animal health and welfare. Information is presented as it applies to traditional and non-traditional livestock species with emphasis on applications pertinent to Alaska. Prerequisites: Introductory Biology NRM 210. (2+3 3+0)

7. **COMPLETE CATALOG DESCRIPTION AS IT SHOULD APPEAR AFTER ALL CHANGES ARE MADE:**

NRM F220	<u>Introduction to Animal Science</u>
3 Credits	Offered Spring
Introduction to the various disciplines that form the study of animal science. Topics include animal nutrition, physiology of reproduction and lactation, genetics and animal breeding, animal behavior, environmental physiology, animal health and welfare. Information is presented as it applies to traditional and non-traditional livestock species with emphasis on applications pertinent to Alaska. Prerequisites: NRM 210. (3+0)	

8. **GRADING SYSTEM:** Specify only one.

LETTER: PASS/FAIL:

9. **ESTIMATED IMPACT**

WHAT IMPACT, IF ANY, WILL THIS HAVE ON BUDGET, FACILITIES/SPACE, FACULTY, ETC.

None except will move from every other year to every year so will use classroom space every spring semester.

10. **LIBRARY COLLECTIONS**

Have you contacted the library collection development officer (kljensen@alaska.edu, 474-6695) with regard to the adequacy of library/media collections, equipment, and services available for the proposed course? If so, give date of contact and resolution. If not, explain why not.

No Yes

11. **IMPACTS ON PROGRAMS/DEPTS:**

What programs/departments will be affected by this proposed action?
Include information on the Programs/Departments contacted (e.g., email, memo)

Will be available for pre-veterinary medicine program as it grows in accordance with recruiting for the new 2+2 Veterinary Medicine program at UAF.

12. **POSITIVE AND NEGATIVE IMPACTS**

Please specify **positive** and **negative** impacts on other courses, programs and departments resulting from the proposed action.

Will be available for pre-veterinary medicine program as it grows in accordance with recruiting for the new 2+2 Veterinary Medicine program at UAF.

13. **JUSTIFICATION FOR ACTION REQUESTED**

The purpose of the department and campus-wide curriculum committees is to scrutinize course change and new course applications to make sure that the quality of UAF education is not lowered as a result of the proposed change. Please address this in your response. This section needs to be self-explanatory. If you ask for a change in # of credits, explain why; are you increasing the amount of material covered in the class? If you drop a prerequisite, is it because the material is covered elsewhere? If course is changing to stacked (400/600), explain higher level of effort and performance required on part of students earning graduate credit. Use as much space as needed to fully justify the proposed change and explain what has been done to ensure that the quality of the course is not compromised as a result.

This course will be taught as a course subsequent to NRM 210 Sustainable Agriculture for students interested in animal agriculture and will form a basis for higher level animal science courses to be developed. This will put the first animal science course available to NRM students and will be offered at the same level as the current first class on plant science, NRM 211 Introduction to Plant Science.

APPROVALS: (Additional signature blocks may be added as necessary.)

<i>M. San Stepha</i>	Date	10/1/14
Signature, Chair Program/Department of:	Agricul ture and Horticul ture	

<i>[Signature]</i>	Date	10/14/14
Signature, Chair, College/School Curriculum Council for:	SNRE	

<i>M. San Stepha</i>	Date	10/1/14
Signature, Dean, College/School of:	SNRE	

Offerings above the level of approved programs must be approved in advance by the Provost:

	Date	
Signature of Provost (if applicable)		

ALL SIGNATURES MUST BE OBTAINED PRIOR TO SUBMISSION TO THE GOVERNANCE OFFICE.

	Date	
Signature, Chair Faculty Senate Review Committee: ___Curriculum Review ___GAAC ___Core Review ___SADAC		

ADDITIONAL SIGNATURES: (As needed for cross-listing and/or stacking; add more blocks as necessary.)

	Date	
Signature, Chair, Program/Department of:		

	Date	
Signature, Chair, College/School Curriculum Council for:		

	Date	
Signature, Dean, College/School of:		

Note: If removing a cross-listing, attach copy of email or memo to indicate mutual agreement of this action by the affected department(s). If degree programs are affected, a Format 5 program change form must also be submitted.

ATTACH COMPLETE SYLLABUS (as part of this application). This list is online at:
<http://www.uaf.edu/uafgov/faculty-senate/curriculum/course-degree-procedures/uaf-syllabus-requirements/>

The Faculty Senate curriculum committees will review the syllabus to ensure that each of the items listed below are included. If items are missing or unclear, the proposed course (or changes to it) may be denied.

SYLLABUS CHECKLIST FOR ALL UAF COURSES

During the first week of class, instructors will distribute a course syllabus. Although modifications may be made throughout the semester, this document will contain the following information (as applicable to the discipline):

1. Course information:

Title, number, credits, prerequisites, location, meeting time (make sure that contact hours are in line with credits).

2. Instructor (and if applicable, Teaching Assistant) information:

Name, office location, office hours, telephone, email address.

3. Course readings/materials:

Course textbook title, author, edition/publisher.
 Supplementary readings (indicate whether required or recommended) and
 any supplies required.

4. Course description:

Content of the course and how it fits into the broader curriculum;
 Expected proficiencies required to undertake the course, if applicable.
 Inclusion of catalog description is *strongly* recommended, and
 Description in syllabus must be consistent with catalog course description.

5. Course Goals (general), and (see #6)

6. Student Learning Outcomes (more specific)

7. Instructional methods:

Describe the teaching techniques (eg: lecture, case study, small group discussion, private instruction, studio instruction, values clarification, games, journal writing, use of Blackboard, audio/video conferencing, etc.).

8. Course calendar:

A schedule of class topics and assignments must be included. Be specific so that it is clear that the instructor has thought this through and will not be making it up on the fly (e.g. it is not adequate to say "lab". Instead, give each lab a title that describes its content). You may call the outline Tentative or Work in Progress to allow for modifications during the semester.

9. Course policies:

Specify course rules, including your policies on attendance, tardiness, class participation, make-up exams, and plagiarism/academic integrity.

10. Evaluation:

Specify how students will be evaluated, what factors will be included, their relative value, and how they will be tabulated into grades (on a curve, absolute scores, etc.) Publicize UAF regulations with regard to the grades of "C" and below as applicable to this course. (Not required in the syllabus, but is a convenient way to publicize this.) Link to PDF summary of grading policy for "C":
http://www.uaf.edu/files/uafgov/Info-to-Publicize-C_Grading-Policy-UPDATED-May-2013.pdf

11. Support Services:

Describe the student support services such as tutoring (local and/or regional) appropriate for the course.

12. Disabilities Services: Note that the phone# and location have been **updated**.

<http://www.uaf.edu/disability/> The Office of Disability Services implements the Americans with Disabilities Act (ADA), and ensures that UAF students have equal access to the campus and course materials.

State that you will work with the Office of Disabilities Services (208 WHITAKER BLDG, 474-5655) to provide reasonable accommodation to students with disabilities.

Introduction to Animal Science
NRM 220 3 credits
University of Alaska
Fairbanks and Palmer and Campuses
Spring Semester

Instructor: Dr. Milan P. Shipka

Phone and voice mail: Fairbanks 907 - 474 - 7429

E-mail: mpshipka@alaska.edu

Office hours: By appointment or when my door is open; I am also available for consultation immediately following class periods.

Class Hours:

Tues and Thurs 9:00 -10:30

Class Locations: **Fairbanks – AHRB 183**
 Palmer - AFES Classroom

Course Objectives: The student will develop a basic understanding of the role of animal agriculture (U.S. and global) and will be exposed to principles of sustainability applied to animal agriculture. The course will introduce basic concepts and principles of animal nutrition, growth, health, behavior, physiology, reproduction, and genetics, as well as practical applications of animal science technology such as disease prevention, artificial insemination and other reproductive management techniques, genetic selection, and concepts of animal well-being. Throughout the semester these concepts and principles will be related to current issues such as population growth, resource use and availability, and changing social preferences related to animal agriculture.

Student Learning Outcomes: By the end of the semester students will demonstrate a basic understanding of the concepts and principles of animal science and sustainable management concepts in animal agriculture. Student Learning Outcomes include:

1) Ability to critically apply knowledge and integrate concepts about the science of keeping domestic and non-domestic animals for production of food and fiber in applications including sustainable agriculture (with consideration of economic, social and environmental sustainability of agricultural practices) and the importance of companion animals in modern culture.

2) Development a basic understanding of the role of livestock in global and U.S. animal agriculture and be able to appreciate the science behind animal care and husbandry as it concerns the role of animals in society.

Text:

Animal Sciences: The Biology, Care, and Production of Domestic Animals. 2010. John R. Campbell, M. Douglas Kenealy, Karen L. Campbell. 4th Edition. McGraw Hill publishers, New York.

ISBN-13: 978-1577666561

Best way to do well in this class:

- 1) Attend the lectures,
- 2) Take good notes,
- 3) Read the assigned readings before class,
- 4) Download the PPT before or right after class,
- 5) Go back through your notes and the PPT soon after class, and
- 6) Complete 14 weekly out-of-class assignments

Course Grading:

Exam I	100 points
Exam II	100
Exam III	100
Final exam	100
Weekly assignments (14)	140
Total	540 points

Final course grades will be assigned on the following basis:

≥ 97%	= A+
92 - 96.9%	= A
90 - 91.9%	= A-
87 - 89.9%	= B+
82 - 86.9%	= B
80 - 81.9%	= B-
77 - 79.9%	= C+
72 - 76.9%	= C
70 - 71.1%	= C-
Etc.	

Really important information:

- 1) Absences on a test day must be prearranged in order to take the exam on a different date.
- 2) The instructor reserves the right to request a Doctor's notice of illness for someone who claims illness of self or a relative as an excuse for missing an exam and requesting a make-up exam.
- 3) The instructor reserves the right to request a copy of an obituary if an individual claims death of another individual as an excuse for missing an exam and requesting a make-up exam.

For important UAF grading policy information please see the 2013-14 UAF Catalog, pages 47-49, or go to <http://www.uaf.edu/catalog/current/academics/regs1.html>

Disabilities Services: The Office of Disability Services implements the Americans with Disabilities Act (ADA) and ensures that UAF students have equal access to the campus and course materials. I will work with the Office of Disabilities Services (208 WHIT, phone: 474-5655) to provide reasonable accommodation to students with disabilities.

	Course Outline	Readings	Weekly Assignment	Assignment due date
Week 1	Animals Science: What is it? Animal Domestication The big five The other nine Still others now?	Chapter 1 Pages 1 - 19	Animal Agriculture Issues	Jan. 26
Week 2	Animal Anatomy Animal Growth and Development	Chapter 10 Pages 179-195 Chapter 12 Pages 203 - 218	Speaking about animals: Terminology associated with livestock and companion animals	Feb. 2
Week 3	Animal Nutrition Physiology of Digestion Avian Monogastric Ruminant Hindgut fermenter Nutrient Utilization	Chapter 18 & 19 Pages 313 – 336	Animal Nutrition	Feb. 9
Week 4	Complete Nutrition Review for Exam Exam I		Animal Reproduction and Lactation	Feb. 16
Week 5	Endocrinology	Chapter 11 Pages 196 – 202	Bovine - Cattle, Bison, & Yak	Feb 23
Week 6	Physiology of Reproduction	Chapter 13 Pages 219 – 240	Equine - Horses, Donkeys, & Mules	Mar. 2
Week 7	Physiology of Egg Laying	Chapters 16 Pages 282 - 294	Porcine – Pig	Mar. 9
Week 8	Complete Reproduction Review for Exam Exam II		Small ruminant - Ovine – Sheep Caprine – Goat, Muskox New World Camelid – Llama, Alpaca, Guanaco, Vicunia	Mar. 23
Week 9	Animal Genetics Animal Breeding and Selection	Chapters 8 & 9 Pages 141 - 178	Cervine: Reindeer, Elk, Deer	Mar. 30
Week 10	Ecology and Environmental Physiology	Chapter 17 Pages 295 - 312	Companion Animals Dog, Cat	Apr. 6
Week 11	Environmental Physiology Review for Exam Exam III		Poultry and Egg Products	Apr. 13
Week 12	Physiology of Lactation	Chapter 15 Pages 259 - 281	Dairy and Milk Products	Apr. 20
Week 13	Animal Health	Chapters 22 & 23 Pages 370 - 415	Hair and Wool Products	Apr. 27
Week 14	Animal Behavior Animal Well Being	Chapter 24 Pages 416 – 430 Chapter 7 Pages 131 - 140	Meat Products	May 4
Week 15	Review for Final	FINAL EXAM TIME - TBD		

