

## Term Information

Effective Term Autumn 2016  
*Previous Value* Summer 2012

## Course Change Information

### What change is being proposed? (If more than one, what changes are being proposed?)

This request is to remove the laboratory component of the course and offer ANIM SCI 2300H as a lecture only course.

### What is the rationale for the proposed change(s)?

In the quarter system, Introductory Animal Sciences was offered as a lecture/laboratory combined course with both honors and non-honors versions. In the transition from quarters to semesters, the lecture and laboratory were offered as separate courses for the non-honors version and remained as a lecture/laboratory combined course for the honors version. The lecture/lab/recitation combination has resulted in course scheduling conflict. Removing the laboratory allows flexibility in scheduling the laboratory component as five to seven sessions of 2200.02 are offered each term.

### What are the programmatic implications of the proposed change(s)?

#### (e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

In removing the laboratory, the honors course will be reduced to 3-credit hours, and students would complete the laboratory component through enrollment in the non-honors laboratory course 2200.02.

Is approval of the request contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

## General Information

Course Bulletin Listing/Subject Area Animal Sciences  
Fiscal Unit/Academic Org Animal Sciences - D1132  
College/Academic Group Food, Agric & Environ Science  
Level/Career Undergraduate  
Course Number/Catalog 2300H  
Course Title Honors Introductory Animal Sciences  
Transcript Abbreviation Hon Ani Sci Intro  
Course Description A study of the basic principles of genetics, breeding, reproduction, nutrition, behavior, and biotechnology as it applies to the molecular, cellular, and physical underpinnings of domesticated animal form and function.  
Semester Credit Hours/Units Fixed: 3  
*Previous Value* Fixed: 4

## Offering Information

Length Of Course 14 Week  
Flexibly Scheduled Course Never  
Does any section of this course have a distance education component? No  
Grading Basis Letter Grade  
Repeatable No  
Course Components Recitation, Lecture  
*Previous Value* Recitation, Laboratory, Lecture  
Grade Roster Component Lecture

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<b>Credit Available by Exam</b>	No
<b>Admission Condition Course</b>	No
<b>Off Campus</b>	Never
<b>Campus of Offering</b>	Columbus

## Prerequisites and Exclusions

<b>Prerequisites/Corequisites</b>	Prereq: Honors standing, or permission of instructor.
<b>Exclusions</b>	Not open to students with credit for 2200.01.
<a href="#">Previous Value</a>	Not open to students with credit for 2200.01 (200) and 2200.02, or 200H.

## Cross-Listings

Cross-Listings

## Subject/CIP Code

<b>Subject/CIP Code</b>	01.0901
<b>Subsidy Level</b>	Baccalaureate Course
<b>Intended Rank</b>	Freshman, Sophomore

## Requirement/Elective Designation

Required for this unit's degrees, majors, and/or minors  
General Education course:  
Biological Science

## Course Details

### **Course goals or learning objectives/outcomes**

- A biological systems based approach to equip a broad range of students with the knowledge and critical thinking skills required to address questions concerning the maintenance, reproduction, and performance of domestic animals
- Be familiar with the historical, social, and biological contexts that govern the study of animals
- Understand basic principles of genetics, breeding, reproduction, nutrition, behavior, and biotechnology
- Appreciate the molecular, cellular, and physical underpinnings of animal form and function
- Develop the ability to critically evaluate concepts in science as they are applied to the study of animals
- Construct innovative approaches to, and solutions of, problems encountered when maintaining animals for human benefit
- Appreciate the uses of animals and the social attitudes regarding how animals are used
- Have a broad understanding of biotechnology and its uses toward advancing the health and well-being of animals
- Consider positive and negative implications of applying modern technology to animal systems

**Content Topic List**

- Process of domestication and a historical perspective of how animals and animal sciences have evolved
- Animal behavior and welfare
- Nutrition: nutrient requirements, physiology, and the importance of different digestive strategies
- Organization of biological systems from molecular structures to physical features
- Genetics & application of genetics for animal breeding: natural versus artificial selection
- Biotechnology: progress, applications, and limitations
- Principles of reproduction and assisted reproductive technologies
- Lactation strategies: nutritional and immunological support of the young
- Animal form and function: ruminants, small ruminants, pseudo-ruminants, hind-gut fermenters, simple nonruminants, avians, and aquatics
- Global status of the animal industries

**Attachments**

- 2300H\_CourseChange\_2015.pdf: cover Letter  
*(Cover Letter. Owner: Lyvers Peffer,Pasha A)*
- ANIMSCI 2300H Syllabus\_2016.pdf: Syllabus  
*(Syllabus. Owner: Lyvers Peffer,Pasha A)*
- ANIMSCI 2200 01 Syllabus.pdf: Syllabus  
*(Syllabus. Owner: Lyvers Peffer,Pasha A)*
- ANIM SCI 2300H\_LAB ASCC Feedback.pdf: ASC Feedback Address  
*(Other Supporting Documentation. Owner: Lyvers Peffer,Pasha A)*

**Comments**

- See 12-18-15 e-mail. *(by Vankeerbergen,Bernadette Chantal on 12/18/2015 01:08 PM)*
- ANIMSCI 2200.01 syllabus is provided for reference to the non-honors course *(by Lyvers Peffer,Pasha A on 11/13/2015 02:43 PM)*

**Workflow Information**

Status	User(s)	Date/Time	Step
Submitted	Lyvers Peffer,Pasha A	11/13/2015 02:43 PM	Submitted for Approval
Approved	Neal,Steven Michael	12/01/2015 11:22 AM	Unit Approval
Approved	Neal,Steven Michael	12/01/2015 11:22 AM	College Approval
Revision Requested	Vankeerbergen,Bernadette Chantal	12/18/2015 01:08 PM	ASCCAO Approval
Submitted	Lyvers Peffer,Pasha A	12/22/2015 09:48 AM	Submitted for Approval
Approved	Neal,Steven Michael	01/05/2016 12:57 PM	Unit Approval
Approved	Neal,Steven Michael	01/05/2016 12:57 PM	College Approval
Pending Approval	Nolen,Dawn Vankeerbergen,Bernadette Chantal Hanlin,Deborah Kay Jenkins,Mary Ellen Bigler Hogle,Danielle Nicole	01/05/2016 12:57 PM	ASCCAO Approval



# THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL, ENVIRONMENTAL SCIENCES  
DEPARTMENT OF ANIMAL SCIENCES

October 21, 2015  
CFAES Academic Affairs  
100 Agricultural Administration  
Columbus, OH 43210

On behalf of the Department of Animal Sciences Academic Affairs Committee, I am submitting a course change request for ANIM SCI 2300H (Honors Introductory Animal Sciences). Specifically, the request is to remove the laboratory component of the course and offer ANIM SCI 2300H as a lecture only course. In the quarter system, Introductory Animal Sciences was offered as a lecture/laboratory combined course with both honors and non-honors versions. In the transition from quarters to semesters, the lecture and laboratory were offered as separate courses for the non-honors version and remained as a lecture/laboratory combined course for the honors version. In removing the laboratory, the honors course will be reduced to 3-credit hours, and students would complete the laboratory component through enrollment in the non-honors laboratory course 2200.02. Five to seven sessions of 2200.02 are offered each term, allowing flexibility in scheduling the laboratory component.

The lecture only honors course will continue to enhance the rigor and breadth of academic studies for students pursuing the Honors Program. The course will continue to be taught by a tenured faculty member and will continue to include enhanced experiences beyond the regular course offering. The Honors enhanced experiences promote individual exploration of the field and introduce research methods, analysis, interpretation, and presentation. Specifically, students evaluate the science that supports or refutes a selected statement from the documentary *Cowspiracy*. The goals are for students to think critically regarding concepts and situations and gain an appreciation of how to interpret scientific data to discern between fact-based and sensationalized media. The assignment fosters self-directed learning and promotes effective writing skills.

The second enhanced experience engages students in a descriptive research study designed to extend students' knowledge of selected course concepts and provide further experience in a laboratory environment. Students use histological techniques to study cell and tissue biology and the understanding of organ system structure as it relates to animal development and function. Working in teams of three to four students, each team selects an organ system (musculoskeletal, digestive, reproductive, etc.) for study of a specific organ or region of the system. Students prepare digital images of processed samples and explore how the structure relates to the specific functions of the tissues. Comparisons among species and the study of common pathologies are encouraged. Findings are presented in an open-forum through oral presentations by team members.

The requested change, removal of the lab component, does not compromise the criteria set-forth by the ASC Honors Committee for an honors course.

Thank you for your consideration of this course change.

Sincerely,

Pasha A. Lyvers Peffer  
Associate Professor

**ANIM SCI H2300: Honors Introductory Animal Sciences  
Fall Semester, 2016**

**Lecture:** Monday, Wednesday and Friday; 1:50-2:45am, 202 Animal Sciences Building  
**Recitation:** Thursday; 1:50-2:45pm, 107 Plumb Hall  
**Credits:** 3

**Instructor:** Lecture  
Pasha A Lyvers Peffer, Department of Animal Sciences  
[lyvers-peffer.1@osu.edu](mailto:lyvers-peffer.1@osu.edu), 292-3896  
Office hours: Tuesday, 11:00-12:30 & Wednesday, 12:30-1:30.

Recitation  
Ann Ottobre, Department of Animal Sciences  
[ottobre.1@osu.edu](mailto:ottobre.1@osu.edu), 292-7135

**Assistants:** Caitlyn Mullins, B.S., Department of Animal Sciences  
[mullins.331@buckeyemail.osu.edu](mailto:mullins.331@buckeyemail.osu.edu)

**Prerequisites:** Honors standing, or permission of instructor. Not open to students with credit for 2200.01. GE Nat Sci Bio course.

**Text:** Required: ANIMAL SCIENCES, Peffer and Day. Kendall Hunt Publishing; Dubuque, IA:2014. ISBN-10: 1465250107; ISBN-13: 978-1465250100

**Course Description:** A study of the basic principles of genetics, breeding, reproduction, nutrition, behavior, and biotechnology as it applies to the molecular, cellular, and physical underpinnings of domesticated animal form and function.

**Goals and Objectives of the GE Natural Science Category:** Courses in natural sciences foster an understanding of the principles, theories and methods of modern sciences, the relationship between science and technology, and the effects of science and technology on the environment.

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students learn key events in the history of science.
3. Students provide examples of the inter-dependence of scientific and technological developments.
4. Students discuss social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

**How students meet the GE Natural Science objectives through this course:** Students will learn how systematic observations of the natural world have helped define current concepts of science and the role of controlled experimentation in support of early scientific theories through discussions of behavior. An understanding of the foundations of modern science will be acquired through discussions of cell theory, heredity, physiological ecology, energy transfer, and evolutionary strategies of today's domesticated species. Students will gain an appreciation of how human intervention has shaped animal form and function throughout history and the role of technology; addressing the implications of biotechnologies current and future applications.

**Goals and Objectives:** Honors Introductory Animal Sciences is a Natural Science (Biological Science), general education, course that promotes an understanding of modern science through a biological systems based approach. Students learn of the relationship between science and technology, consider the implications of scientific discoveries, and acquire the knowledge and critical thinking skills required to evaluate the potential of science and technology to address problems from a global arena as they pertain to domestic animals used for human benefit.

1. Students appreciate whole animal structure, form and function; growth and development of systems from the cellular level.
2. Students integrate knowledge among anatomy, physiology, genetics, nutrition, and reproduction.
3. Students learn techniques applicable to animal management systems.
4. Students gain knowledge toward the respectful management of animals and the environment.
5. Students gain awareness of how the disciplines of Animal Sciences enhance animal management systems and impact their resulting products

**How students meet objectives through this course:** The course embodies fundamental concepts in areas of genetics, reproduction, nutrition, behavior, and biotechnology. Students are introduced to the molecular and cellular mechanisms that underscore the function of biological systems and how knowledge in this area is applicable toward appropriate management of domesticated animals. Students will consider how the study of animals has advanced from early scientific discoveries. Through the study of animal systems from the local to global arena, students will appreciate the use of animals and their contributions across diverse populations and understand the local and global impacts of the application of new technologies to the animal industries. In the laboratory activities, students reinforce concepts of the lecture and pursue a more in depth understanding of these concepts. As students are introduced to the studies of animal science, they will gain an appreciation of their role toward the advancement of domesticated animals, learn to recognize issues that concern the animal industries, and discover how to improve current human –animal relationships.

### **Animal Sciences H2300 Learning Outcomes:**

#### Successful students will:

1. Be familiar with the historical, social, and biological contexts that govern the study of animals.
2. Understand basic principles of genetics, breeding, reproduction, nutrition, behavior, and biotechnology.
3. Appreciate the molecular, cellular, and physical underpinnings of animal form and function.
4. Develop the ability to critically evaluate concepts in science as they are applied to the study of animals.
5. Construct innovative approaches to, and solutions of, problems encountered when maintaining animals for human benefit.
6. Appreciate the uses of animals and social attitudes regarding how animals are used.
7. Have a broad understanding of biotechnology and it's uses toward advancing the health and well-being of animals
8. Consider positive and negative implications of applying modern technology to animal systems.

## Lecture and Reading Schedule

Week	Topic	Text
1	Importance of domesticated animals to humans	Chapter 1
2	Evolution of domesticated species and the process of their domestication	Chapter 2
3	Animal Behavior and Welfare	Chapter 3 and 16
4	Nutrition: nutrient requirements, physiology, and the importance of different digestive strategies.	Chapter 4
5	Organization of biological systems from molecular structures to physical features.	Chapter 5
6	Genetics & application of genetics for animal breeding: natural versus artificial selection.	Chapter 5
7	Biotechnology: progress, applications and limitations.	Chapter 5
8	Principles of reproduction and assisted reproductive technologies.	Chapter 6
9	Lactation strategies: Nutritional and immunological support of the young.	Chapter 7
10	Animal form and function: Ruminants	Chapter 8 and 9
11	Animal form and function: Small Ruminants & Pseudo-ruminants	Chapter 10 and 14
12	Animal form and function: Hind-gut fermenters	Chapter 12
13	Animal form and function: Simple nonruminants & Avians	Chapter 11 and 13
14	Animal form and function: Aquatics	Chapter 15
15	Did we cover everything?	
	<b>Final Exam</b>	

**Evaluation** Three exams will be given during the semester. Two lecture midterms worth 100 points each and a lecture final worth 150 points. **Material taught in lectures is cumulative and essential themes and concepts taught during the course may appear on any exam.** Exams will be mixed format. **Exams will not be returned.** There will be a written assignment where students consider controversies in Animal Sciences, evaluate the science behind the controversy, and develop critical synopsis of the research using peer reviewed journal references (100 points). A group project designed to allow students to explore resources available to pursue undergraduate research and to provide experience in a laboratory environment will expand understanding of organ system structure and cellular function using basic histological techniques (100 points).

Evaluation	POINTS	
Exam I	100	SEPTEMBER 23(1:50-2:45)
Exam II	100	OCTOBER 28 (1:50-2:45)
FINAL EXAM	150	DECEMBER 16 (2:00-3:45)
Written assignment (Controversies in Animal Sciences)	100	NOVEMBER 23 (IN CLASS)
Group project	100	DECEMBER 8
<b>Total</b>	<b>550</b>	

**Grade Scale:** Grades will be based on the total points earned as a percentage of total points possible and letter grades assigned as follows:

Percentage	Grade	Percentage	Grade
93-100	A	73-76.9	C
90-92.9	A-	70-72.9	C-
87-89.9	B+	67-69.9	D+
83-86.9	B	60-66.9	D
80-82.9	B-	<60	E
77-79.9	C+		

## SECRETS TO SUCCESS

Attend class regularly  
Be an active participant in class activities  
Ask if you need clarification  
Review material after class  
Prepare for exams in advance, do not wait until the last minute to study  
Seek help early in the semester if you are having difficulty  
Get to know other students in the class; they can be your best learning tool  
Don't be afraid to venture into what is not familiar.

**Course Management System** This course is using Canvas (<https://carmen.osu.edu> & select the Canvas icon) to manage course content and grades. Students are expected to check this site frequently to receive updates regarding the course. Note, important information delivered during lecture may not be posted to Canvas and Canvas is not a substitute for class attendance.

### Course Policies

**Attendance Policy:** You are expected to attend class and be punctual. Attendance is not officially recorded, but may be considered in final grade decisions. If an emergency should warrant that a lecture be missed, prior notification should be given to the instructor. On dates of scheduled exams, the instructor must be contacted the day of the absence. In case of an illness, you must be seen by and **receive written documentation from a professional health care provider on the day of the absence**. Routine specialist appointments (optometrist, dentist, etc.) are not accepted as an excused absence for an exam. In instances of a **death in the family, documentation in the form of a death certificate, obituary notice, or funeral remembrance card is required. Request for excuse of absence for University sanctioned events must pre-approved by the instructor**. You are responsible for submitting appropriate documentation for absences within two lecture periods from the absence.

**Exam Policy:** If you miss an exam and have a valid, documented excuse (as noted above in the attendance policy), you will be given an opportunity to attend a make-up exam. **Make-up exams are available at 4:00 pm on the Friday following the regularly scheduled mid-term (SEPT 25 and OCT 30 for Exam I and Exam II, respectively). There are no alternative make-up exam dates.** If your absence is not considered valid for missing an exam or if you do not attend the make-up exam date, you will receive a grade of 0. Validity of the excuse is up to the instructor's discretion. Missing an exam due to minor illness, transportation issues, faulty alarm clocks, etc. will result in a grade of zero. If you miss the final exam, you will receive an E for the course.

**E-Mail Etiquette:** The use of e-mail has made the classroom professor more approachable and accessible to the student. However, students should realize that e-mail should not always be used as a casual form of communication and professional relationships should be maintained when using e-mail for a class. Below I have included guidelines from Bloomsbury's guide on email etiquette that you should follow when drafting your e-mail. **I will not respond to e-mails that I consider inappropriate. I will respond to appropriate emails in a timely manner, do not expect an immediate reply. If you require an immediate response consider visiting with me in person.**

#### DO

- Include a descriptive statement in the subject line.
- Use proper salutations when beginning an e-mail.
- Be concise in the body of the e-mail, use complete sentences and proper grammar.



- Use an appropriate closure at the end of each e-mail followed by your first and last name.
- If replying to an e-mail, reference the original e-mail and its content.
- Be selective of your choice of words. Emotions are difficult to convey in text and without the benefit of facial expressions your sentiment can be lost in the words you choose to write.

#### DON'T

- Use all capital letters; this conveys a tone of ANGER.
- Use e-mail as a format to criticize other individuals.
- Ask for your grade via e-mail. Grades will not be discussed by e-mail. If you need to discuss a graded item make an appointment to do so in my office.
- E-mail to inquire when grades will be posted. We will work toward submitting grades promptly, however, recognize that grading assignments and exams requires considerable time to ensure uniformity and fairness.
- Send an e-mail out of frustration or anger. Learn to save the e-mail as a draft and review at a later time when emotions are not directing the content.

**Punctuality:** Punctuality is a necessity as tardiness is disruptive to the entire class. Students who are repeatedly tardy are subject to a reduction in total points assessed toward the final grade.

**Technology Devices:** Use of electronic devices can be distractive to learning, not only for those using the devices but also for other students in the class. All portable communication devices must be turned **OFF** or placed in **Etiquette Mode** and stored out of sight during class period. You are permitted to use a tablet or related device to access or take notes during class. You are not permitted to use any electronic device to perform non-class related activities (social networking, instant messaging, checking email, surfing the internet, gaming, etc.). Should the use of accepted electronic devices become a distraction to other students or should it be found that the devices are used for non-class related activities; the further use of such devices will be prohibited. The use of electronic devices is strictly prohibited during exams.

**Respecting Intellectual Property:** Course materials are the property of the instructors. Students may not distribute provided course material, except to other students enrolled within the same course, without the permission of the instructor. Course material includes, but is not limited to, lecture documents, written or transcribed notes, video or audio recordings, etc. You must receive written permission from the instructor prior to recording lectures.

#### University Policies

**Disability Services:** Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

**Academic Misconduct:** Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's *Code of Student Conduct*, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. If you have any questions about the above policy or what constitutes academic misconduct in this course, please contact me or visit [oaa.osu.edu/coam/home.html](http://oaa.osu.edu/coam/home.html).

**ANIM SCI 2200.01: Introductory Animal Sciences**  
**Fall Semester, 2015**

**Lecture:** Monday, Wednesday and Friday; 11:30-12:25am, 103 Kottman Hall

**Instructor:** Pasha A Lyvers Peffer, Department of Animal Sciences  
214 Animal Sciences Building  
[lyvers-peffer.1@osu.edu](mailto:lyvers-peffer.1@osu.edu), 292-3896  
Office hours: Tuesday, 11:00-12:30 & Wednesday 12:30-1:30.

**Assistants:** Kim Wilson, B.S., Department of Animal Science, Cal Poly-San Luis Obispo, M.S. Department of Poultry Science, University of Georgia  
**Office hours:** Monday, 3:00-4:00, 202 Plumb Hall  
[wilson.3472@buckeyemail.osu.edu](mailto:wilson.3472@buckeyemail.osu.edu)

**Prerequisites:** Not open to students with credit for 2300H. GE Nat Sci Bio course.

**Text:** Required: ANIMAL SCIENCES, Peffer and Day. Kendall Hunt Publishing; Dubuque, IA:2014. ISBN-10: 1465250107; ISBN-13: 978-1465250100

**Goals and Objectives:** Introductory Animal Sciences is a Natural Science (Biological Science), general education, course that promotes an understanding of modern science through a biological systems based approach. Students learn of the relationship between science and technology, consider the implications of scientific discoveries, and acquire the knowledge and critical thinking skills required to evaluate the potential of science and technology to address problems from a global arena as they pertain to domestic animals used for human benefit.

**Learning Objectives:**

1. relate structure, form and function, growth and development of animal systems from the cellular to the organismal level.
2. demonstrate knowledge among anatomy, physiology, genetics, nutrition, and reproduction.
3. discuss practices applicable to animal management systems.
4. assess the practices of respectful management of animals and the environment.

**How students meet objectives through this course:** The course embodies fundamental concepts in areas of genetics, reproduction, nutrition, behavior, and biotechnology. Students are introduced to the molecular and cellular mechanisms that underscore the function of biological systems and how knowledge in this area is applicable toward appropriate management of domesticated animals. Students will consider how the study of animals has advanced from early scientific discoveries. Through the study of animal systems from the local to global arena, students will appreciate the use of animals and their contributions across diverse populations and understand the local and global impacts of the application of new technologies to the animal industries.

**Course Description:** A study of the basic principles of genetics, breeding, reproduction, nutrition, behavior, and biotechnology as it applies to the molecular, cellular, and physical underpinnings of domesticated animal form and function.

**Goals and Objectives of the GE Natural Science Category:** Courses in natural sciences foster an understanding of the principles, theories and methods of modern sciences, the relationship between science and technology, and the effects of science and technology on the environment.

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students learn key events in the history of science.
3. Students provide examples of the inter-dependence of scientific and technological developments.
4. Students discuss social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world

**How students meet the GE Natural Science objectives through this course:** Students will learn how systematic observations of the natural world have helped define current concepts of science and the role of controlled experimentation in support of early scientific theories through discussions of behavior. An understanding of the foundations of modern science will be acquired through discussions of cell theory, heredity, physiological ecology, energy transfer, and evolutionary strategies of today's domesticated species. Students will gain an appreciation of how human intervention has shaped animal form and function throughout history and the role of technology; addressing the implications of biotechnologies current and future applications.

### Lecture and Reading Schedule

Week	Topic	Text	Assignment Due
1	Importance of domesticated animals to humans	Chapter 1	
2	Evolution of domesticated species and the process of their domestication	Chapter 2	SEPT 4
3	Animal Behavior and Welfare	Chapter 3 and 16	SEPT 11
4	Nutrition: physiology, and the importance of different digestive strategies.	Chapter 4	SEPT 18
5	Nutrition: nutrient requirements	Chapter 5	<b>EXAM</b>
6	Organization of biological systems from molecular structures to physical features. Genetics & application of genetics for animal breeding: natural versus artificial selection.	Chapter 5	OCT 2
7	Genetics continued Biotechnology: progress, applications and limitations.	Chapter 5	OCT 9
8	Principles of reproduction and assisted reproductive technologies.	Chapter 6	OCT 16
9	Lactation strategies: Nutritional and immunological support of the young.	Chapter 7	OCT 23
10	Animal form and function: Ruminants	Chapter 8 and 9	<b>EXAM</b>
11	Animal form and function: Small Ruminants & Pseudo-ruminants	Chapter 10 and 14	NOV 6
12	Animal form and function: Hind-gut fermenters	Chapter 12	NOV 13
13	Animal form and function: Simple nonruminants & Avians	Chapter 11 and 13	NOV 20
14	Animal form and function: Aquatics	Chapter 15	DEC 4
15	Did we cover everything?		
	<b>FINAL EXAM</b>		DEC 17

**Evaluation** Three exams will be given during the semester. Two lecture midterms worth 100 points each and a lecture final worth 150 points. As the course progresses, concepts learned early will contribute to greater understanding of new concepts, thus this course is **comprehensive**. **Exam will reflect the comprehensive nature of material.** Exams will consist of mixed format questions and **exams will not be returned**. In addition, 150 points will be earned through course quizzes submitted through Carmen. You will be allowed to drop your lowest course quiz.

Evaluation	POINTS	
Exam I	100	SEPTEMBER 23 (11:30-12:25)
Exam II	100	OCTOBER 28 (11:30-12:25)
Quizzes	150	REFER TO LECTURE SCHEDULE
FINAL EXAM	150	DECEMBER 17 (10:00-11:45)
<b>Total</b>	<b>500</b>	

Assignments completed online using Carmen may be completed using any computer that allows you to access the Carmen site for ANIM SCI 2200.01. However, **it is not recommended to use wireless internet access** due to the fact that the internet connection may be lost during the course of completing the assignment. **You will be given two attempts to access and complete the Quizzes.**

**Carmen quizzes are available following Wednesdays lecture and are due by 11:55pm on Friday.** Carmen quizzes are open book and open notes. However, you will need to study and understand the course material before completing the quiz, just as you would for any other class. The quizzes are timed and you will not be able to spend a long time on each question. You are expected to complete the quiz without assistance from others and completion of the quiz is expected to reflect your own efforts.

**Grade Scale:** Grades will be based on the total points earned as a percentage of total points possible and letter grades assigned as follows:

Percentage		Percentage	
93-100	A	73-76.9	C
90-92.9	A-	70-72.9	C-
87-89.9	B+	67-69.9	D+
83-86.9	B	60-66.9	D
80-82.9	B-	<60	E
77-79.9	C+		

#### SECRETS TO SUCCESS

- Attend class regularly
- Be an active participant in class activities
- Ask if you need clarification
- Review material after class
- Prepare for exams in advance, do not wait until the last minute to study
- Seek help early in the semester if you are having difficulty
- Get to know other students in the class; they can be your best learning tool
- Don't be afraid to venture into what is not familiar.

**Course Management System** This course uses Carmen (<http://carmen.osu.edu>) to manage course content and grades. Students are expected to check this site frequently to receive updates regarding the course. Note, important information delivered during lecture may not be posted to Carmen and Carmen is not a substitute for class attendance.

## Course Policies

**Attendance Policy:** You are expected to attend class and be punctual. If an emergency should warrant that a lecture be missed, prior notification should be given to the instructor. On dates of scheduled exams, the instructor must be contacted the day of the absence. In case of an illness, you must be seen by and **receive written documentation from a professional health care provider on the day of the absence. A signature is required from your healthcare professional and sufficient information that confirms the medical necessity to exclude you from the class must be included in the documentation.** Routine specialist appointments (optometrist, dentist, etc.) are not accepted as an excused absence for an exam. In instances of a **death in the family, documentation in the form of a death certificate, obituary notice, or funeral remembrance card is required. Request for excuse of absence for University sanctioned events must pre-approved by the instructor.** You are responsible for submitting appropriate documentation for absences within two lecture periods from the absence.

Every effort has been made to provide clear and accurate information within this syllabus. Should events required that information contained herein must be modified, announcements will be made in class. It is your responsibility to acquire any information provided during times of absence.

**Exam Policy:** If you miss an exam and have a valid, documented excuse (as noted above in the attendance policy), you will be given an opportunity to attend a make-up exam. **Make-up exams are available at 4:00 pm on the Friday following the regularly scheduled mid-term (SEPT 25 and OCT 30 for Exam I and Exam II, respectively). There are no alternative make-up exam dates.** If your absence is not considered valid for missing an exam or if you do not attend the make-up exam date, you will receive a grade of 0. Validity of the excuse is up to the instructor's discretion. Missing an exam due to minor illness, transportation issues, faulty alarm clocks, etc. will result in a grade of zero. If you miss the final exam, you will receive an E for the course.

**E-Mail Etiquette:** The use of e-mail has made the classroom professor more approachable and accessible to the student. However, students should realize that e-mail should not always be used as a casual form of communication and professional relationships should be maintained when using e-mail for a class. Below I have included guidelines from Bloomsbury's guide on email etiquette that you should follow when drafting your e-mail. **I will not respond to e-mails that I consider inappropriate. I will respond to appropriate emails in a timely manner, do not expect an immediate reply. If you require an immediate response consider visiting with me in person.**

### DO

- Include a descriptive statement in the subject line.
- Use proper salutations when beginning an e-mail.
- Be concise in the body of the e-mail, use complete sentences and proper grammar.
- Use an appropriate closure at the end of each e-mail followed by your first and last name.
- If replying to an e-mail, reference the original e-mail and its content.
- Be selective of your choice of words. Emotions are difficult to convey in text and without the benefit of facial expressions your sentiment can be lost in the words you choose to write.

### DON'T

- Use all capital letters; this conveys a tone of ANGER.
- Use e-mail as a format to criticize other individuals.
- Ask for your grade via e-mail. **Grades will not be discussed by e-mail.** If you need to discuss a graded item make an appointment to do so in my office.
- E-mail to inquire when grades will be posted. We will work toward submitting grades promptly, however, recognize that grading assignments and exams requires considerable time to ensure uniformity and fairness.
- Send an e-mail out of frustration or anger. Learn to save the e-mail as a draft and review at a later time when emotions are not directing the content.

**Punctuality:** Punctuality is a necessity as tardiness is disruptive to the entire class. Students who are repeatedly tardy are subject to a reduction in total points assessed toward the final grade.

**Technology Devices:** Use of electronic devices can be distracting to learning, not only for those using the devices but also for other students in the class. All portable communication devices must be turned **OFF** or placed in **Etiquette Mode** and stored out of sight during class period. You are permitted to use a tablet or related device to access or take notes during class. You are not permitted to use any electronic device to perform non-class related activities (social networking, instant messaging, checking email, surfing the internet, gaming, etc.). Should the use of accepted electronic devices become a distraction to other students or should it be found that the devices are used for non-class related activities; the further use of such devices will be prohibited. The use of electronic devices is strictly prohibited during exams.

Every student is entitled to full participation of this class without disruption. Please be amicable to your fellow classmates and respect one another's class time. Disruptive behavior will not be tolerated. Students who engage in disruptive conduct will receive a warning. Continuation of disruptive behavior that results in impairment of teaching or learning processes of others will result in disenrollment from the course.

**Respecting Intellectual Property:** Course materials are the property of the instructors. Students may not distribute provided course material, except to other students enrolled within the same course, without the permission of the instructor. Course material includes, but is not limited to, lecture documents, written or transcribed notes, video or audio recordings, etc. You must receive written permission from the instructor prior to recording lectures.

### University Policies

**Disability Services:** Students with disabilities that have been certified by the Office for Disability Services will be appropriately accommodated, and should inform the instructor as soon as possible of their needs. The Office for Disability Services is located in 150 Pomerene Hall, 1760 Neil Avenue; telephone 292-3307, TDD 292-0901; <http://www.ods.ohio-state.edu/>.

**Academic Misconduct:** Academic integrity is essential to maintaining an environment that fosters excellence in teaching, research, and other educational and scholarly activities. Thus, The Ohio State University and the Committee on Academic Misconduct (COAM) expect that all students have read and understand the University's *Code of Student Conduct*, and that all students will complete all academic and scholarly assignments with fairness and honesty. Students must recognize that failure to follow the rules and guidelines established in the University's *Code of Student Conduct* and this syllabus may constitute "Academic Misconduct."

The Ohio State University's *Code of Student Conduct* (Section 3335-23-04) defines academic misconduct as: "Any activity that tends to compromise the academic integrity of the University, or subvert the educational process." Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* is never considered an "excuse" for academic misconduct, so I recommend that you review the Code of Student Conduct and, specifically, the sections dealing with academic misconduct.

If I suspect that a student has committed academic misconduct in this course, I am obligated by University Rules to report my suspicions to the Committee on Academic Misconduct. If COAM determines that you have violated the University's *Code of Student Conduct* (i.e., committed academic misconduct), the sanctions for the misconduct could include a failing grade in this course and suspension or dismissal from the University. [oaa.osu.edu/coam/home.html](http://oaa.osu.edu/coam/home.html).



December 20, 2015

Dear ASCC Natural and Mathematical Sciences Panel Members,

The feedback following review of Animal Science 2300H by the ASCC Natural and Mathematical Sciences Panel is addressed as follows:

Does this change impact (1) the GE assessment plan and (2) the course goals/learning objectives (i.e., by removing the H lab will some of these learning objectives disappear)? Please provide an explanation.

- 1) The course uses classroom assignments as direct measures of GE assessment. These classroom assignments include embedded test questions and a written assignment. Both direct measures of assessment are associated with the lecture component of the course, and thus, dissociation of the lab does not impact the courses GE assessment plan.
- 2) The removal of the lab does not change goals/learning objectives. The goals/learning objectives remain the same when comparing the original course syllabus and the proposed syllabus. While the lab offers a hands-on approach to the concepts of the course, this hands-on approach provides a different learning format that complements core content of the lecture. Based on our observations of ANIMSCI 2200.01 and 2200.02, the two course sequence offers student flexibility without compromise of course goals, and we anticipate similar outcomes with the two course sequence proposed for 2300H.

Also, will you change the prereq./concur. information for Animal Sciences 2200.02 to “2200.01 or 2300H, or permission of instructor” (right now, it only says, “2200.01, or permission of instructor”) and remove its current exclusion of Animal Science 2300H? That way, students who will take 2300H and 2200.02 will actually be able to fulfill a GE Natural Science—Biological Sciences requirement with lab credit.

Yes, the prerequisite/concurrent and exclusion information for ANIMSCI 2200.02 will be changed accordingly to reflect changes in 2300H.

Sincerely,

Pasha A Lyvers Peffer  
Associate Professor, The Ohio State University