Fiscal Unit/Academic Org	Animal Sciences - D1132		
Administering College/Academic Group	Food, Agric & Environ Science		
Co-adminstering College/Academic Group			
Semester Conversion Designation	New Program/Plan		
Proposed Program/Plan Name	Animal Pre-Veterinary Medicine Minor		
Type of Program/Plan	Undergraduate minor		
Program/Plan Code Abbreviation	VETMED-		
Proposed Degree Title	Animal Pre-Veterinary Medicine Minor		

# **Credit Hour Explanation**

Program credit hour requ	irements	A) Number of credit hours in current program (Quarter credit hours)	B) Calculated result for 2/3rds of current (Semester credit hours)	C) Number of credit hours required for proposed program (Semester credit hours)	D) Change in credit hours
Total minimum credit hours completion of progra				15	
Required credit hours offered by the unit	Minimum			15	
	Maximum			16	
Required credit hours offered outside of the unit	Minimum			0	
	Maximum			0	
Required prerequisite credit hours not included above	Minimum			4	
	Maximum			4	

# Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

### Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? No

### **Program Specializations/Sub-Plans**

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

# Pre-Major

Does this Program have a Pre-Major? No

#### Pre-Vet Minor Concurrence 20101203133217070.pdf Attachments (Support/Concurrence Letters. Owner: Osborne, Jeanne Marie) Cover Letter from the Chair.pdf (Letter from Program-offering Unit. Owner: Zerby, Henry Nevin) Animal Pre-Veterinary Medicine Minor Rationale 4-25-11.docx (Program Rationale Statement. Owner: Zerby, Henry Nevin) CCI Subcommittee Chair Letter Animal Pre Veterinary Medicine Minor.doc: CCI Subcommittee Chair Letter (Other Supporting Documentation. Owner: Vankeerbergen, Bernadette Chantal) final.pdf: Final document for OAA (Other Supporting Documentation. Owner: Vankeerbergen, Bernadette Chantal) Animal Pre-Veterinary Medicine Minor response 7-21.docx: Response to Questions (Other Supporting Documentation. Owner: Zerby, Henry Nevin) Animal Pre-Veterinary Medicine Minor 8-21-11.docx (Semester Advising Sheet(s). Owner: Zerby, Henry Nevin) Comments • This minor has already been approved. This is the cleanup up from various comments (by Pfister, Jill Ann on 09/28/2011) 08:55 AM) Sent back for revisions per CAA meeting on 7/28. (by Soave, Melissa A on 07/28/2011 03:49 PM) Approved for ASC students unanimously by ASC CCI on 6/10/11. (by Gustafson, Terry Lee on 06/14/2011 08:31 AM) **Workflow Information** Status User(s) Date/Time Step Submitted Zerby, Henry Nevin 12/02/2010 05:11 AM Submitted for Approval Osborne, Jeanne Marie 12/03/2010 08:05 AM Unit Approval Approved **Revision Requested** Pfister, Jill Ann 12/08/2010 06:07 AM **College** Approval Submitted Osborne, Jeanne Marie 12/08/2010 09:46 AM Submitted for Approval Approved Osborne, Jeanne Marie 12/08/2010 09:59 AM Unit Approval **Revision Requested** Pfister, Jill Ann 12/30/2010 12:18 PM College Approval Submitted for Approval Submitted Zerby, Henry Nevin 12/30/2010 01:31 PM Approved Zerby, Henry Nevin 12/30/2010 01:34 PM Unit Approval Approved Pfister, Jill Ann 01/14/2011 04:47 PM **College** Approval

Revision Requested	Vankeerbergen,Bernadet te Chantal	02/22/2011 01:19 PM	ASCCAO Approval
Submitted	Zerby,Henry Nevin	05/20/2011 09:47 AM	Submitted for Approval
Approved	Zerby,Henry Nevin	05/20/2011 09:50 AM	Unit Approval
Approved	Pfister,Jill Ann	05/22/2011 12:27 PM	College Approval
Approved	Vankeerbergen,Bernadet te Chantal	06/10/2011 03:01 PM	ASCCAO Approval
Approved	Gustafson, Terry Lee	06/14/2011 08:31 AM	ASC Approval
Revision Requested	Soave, Melissa A	07/28/2011 03:49 PM	CAA Approval
Submitted	Zerby, Henry Nevin	09/27/2011 01:17 PM	Submitted for Approval
<b>Revision Requested</b>	Zerby, Henry Nevin	09/27/2011 01:18 PM	Unit Approval
Submitted	Zerby,Henry Nevin	09/27/2011 01:20 PM	Submitted for Approval
Approved	Zerby, Henry Nevin	09/27/2011 02:51 PM	Unit Approval
Approved	Pfister, Jill Ann	09/28/2011 10:47 AM	College Approval
Pending Approval	Nolen,Dawn Jenkins,Mary Ellen Bigler Meyers,Catherine Anne Vankeerbergen,Bernadet te Chantal Hanlin,Deborah Kay	09/28/2011 10:47 AM	ASCCAO Approval

#### **Department of English**



421 Denney Hall 164 W. 17th Avenue Columbus, OH 43210

Tel: (614) 292-6065 Fax: (614) 292-7816 english.osu.edu

To: Larry Krissek, Chair, Committee on Curriculum and Instruction (CCI) From: James Fredal, Chair, CCI Social, Behavioral, Biological, Mathematical and Physical Sciences Subcommittee Re: Animal Pre-Veterinary Medicine Minor Proposal

Date: May 24, 2011

Larry:

The Sciences subcommittee of the CCI met to review the new Animal Pre-Veterinary Medicine Minor on February 21, 2011.

This is a new minor and is intended for students who are planning a career in Veterinary medicine and as a replacement for the Life Sciences Minor, which is being withdrawn. Advising will be administered through the Department of Animal Sciences, and since all the courses are already currently being taught, the new minor will not require additional resources to administer. This may, however, depend on the number of new students taking the minor from outside FAES. Concurrence for the minor is provided by the College of Veterinary Medicine.

The Minor will consist of two required courses plus a minimum of 9 elective hours, all drawn from Animal Sciences. The proposal was approved with contingencies which have since been addressed, though I now notice that the advising sheet refers to it once as the Animal Veterinary Medicine minor (rather than Animal *Pre*-Veterinary Medicine minor). Otherwise it looks complete and correct and so we now forward it to the full CCI with a recommendation for its approval.

If I can answer any questions about this proposal, please let me know.

Thanks.

Jim Fredal

cc: Bernadette Vankeerbergen

#### **Department of Animal Sciences**

Office of the Chair 2029 Fyffe Road Columbus, OH 43210-1095

Phone (614) 292-1876 Fax (614) 292-2929 E-mail Hogan.4@osu.edu

May 11, 2011

Office of Academic Affairs 203 Bricker Hall 190 North Oval Mall Columbus, OH 43210-1358

Dear Office of Academic Affairs,

On behalf of the faculty of the Department of Animal Sciences, I am pleased to share our proposed transition plan for our curriculum for a quarter based system to a semester based system as well as the transition plans for the students who will be enrolled during the transition. The faculty embraced this as an opportunity to revise the entire Animal Sciences curriculum. The Department semester conversion process was led by Associate Professor Henry Zerby, Chair of the Academic Affairs Committee and Professor Michael Day, Chair of the Graduate Studies Committee. Jeanne Osborne, who provided staff support for the Q2S process attended the UCAT Winter Curriculum Design Institute to gain additional information regarding curriculum mapping, learning goal development and curriculum assessment. The Departmental Academic Affairs Committee initiated the discussions in the Fall of 2009 and then an Ad-hoc Q2S committee, comprised of five faculty members, was developed in early 2010 to champion the cause. The Departmental Ad-hoc committee that addressed the quarter-to-semester conversion utilized the following guiding principles:

- 1) Collect input from stakeholders and students regarding the current needs of graduates entering the work place or pursuing advanced degrees
- 2) Refine the learning goals
- 3) Establish or revise as necessary the curriculum to meet the learning goals while simultaneously advancing the knowledge and skills of our students
- 4) Develop an assessment plan that will allow us to monitor and enhance our programs

The Ad-hoc Committee began with the development of a timeline, which would culminate in the submission of the program proposal to the College of Food, Agricultural, and Environmental Sciences, in October 2010. The Ad hoc Committee began by refining the existing Program Learning Goals and desired outcomes. A series of "brown bag" meetings was established and faculty, staff and students were invited to give input regarding learning goals and participate in a systematic discussion of the existing curriculum and proposed changes. Simultaneously the curricula of peer semester



institutions was obtained and reviewed. Meetings were also held with key Department stakeholders, including those from collaborating units on the Columbus campus and the Agricultural Technical Institute in Wooster, Ohio. Semester course design was assigned to members of the Ad-hoc committee, who collaborated with current instructors in the Department. The proposed curriculum was presented formally to the entire faculty at the June 2010 faculty meeting for discussion and was approved by the faculty at the September 2010 faculty meeting.

In addition to the programs we offer within our College, we are continuing discussions with Human Nutrition regarding the Ohio State University Nutrition (OSUN) graduate program, which is a collaborative program between the Department of Food Science and Technology, the Department of Animal Sciences, and the Department of Human Nutrition, and the B.S. in Nutrition. The B.S. in Nutrition is also a collaborative program that was previously also administered among the three aforementioned departments, however, Food Science and Technology has elected to with draw from the B.S. in Nutrition, thus leaving the Department of Animal Sciences and the Department of Human Nutrition coordinating the B.S. in Nutrition.

Thus, we are submitting proposals for the following programs:

- B.S. in Agriculture Animal Sciences Major
  - o Animal Biosciences Specialization
  - o Animal Industries Specialization
  - o Veterinary Technology Specialization
  - B.S. in Agriculture Meat Science Major
- B.S. in Nutrition (co-program with Human Nutrition) Animal Sciences Major
- M.S. in Animal Sciences
- Ph.D. in Animal Sciences
- Our Department also participates in the OSUN (Ohio State University Nutrition) Interdisciplinary Graduate Program (this program is being submitted by Human Nutrition)
- Minors:
  - o Animal Sciences
  - o Animal Nutrition
  - Equine Science
  - o Animal Pre-Veterinary Medicine
  - o Meat Science
- Certificate in Dairy Science

The M.S. and Ph.D. in Animal Sciences programs consist primarily of direct conversions with a couple of minor revisions. Notable changes to the B.S. programs are as follows:

<u>B.S. in Agriculture - Animal Sciences Major</u> - We have developed specializations within the Animal Sciences Major (Animal Biosciences Specialization, Animal Industries Specialization, and revision of the Veterinary Technology Specialization). Feedback obtained from stakeholders, former students, and current students also resulted in: incorporating additional emphasis on animal well-being, animal behavior, and the role of animals within our society within the introductory level Animal Sciences coursework; adding animal health and animal immunology courses to the core curriculum; and, incorporating global awareness throughout the curriculum, including structuring the curriculum to provide additional opportunities for students to engage in study tours and study abroad experiences.

- The Animal Biosciences Specialization provides the flexibility to obtain an additional emphasis in several natural science areas for those students who are working towards continued opportunities in professional and graduate degree programs.
- The Animal Industries Specialization allows students the flexibility to obtain additional species and/or specific discipline courses, as well as additional business courses to help them pursue their career interests within the animal production and allied industries.
- The Veterinary Technology Specialization is a dual degree program, through which students who are accepted into the program receive both a BS in Agriculture from OSU and an Associate's Degree in Veterinary Technology from Columbus State Community College (CSCC). This is an existing program that was approved approximately 6-7 years ago, and approximately 5 cohorts of students have successfully completed the dual degree program. It requires course work at both OSU and CSCC. Some of the coursework that students take at CSCC as part of their Associate's degree program has been permitted to fulfill degree requirements from OSU (the internships) and some of the course work at OSU has been permitted to fulfill degree requirements from CSCC (the reproductive physiology and animal health courses as well as the anatomy course). Completion of the Veterinary Technology program replaces the FAES minor requirement, so students are not unduly burdened with this coursework on top of a minor.

Students from OSU must apply to the program during their second year at OSU. If they are admitted, they are guaranteed seats in the Veterinary Technology program at CSCC as long as they continue to progress satisfactorily toward their degree completion at both OSU and CSCC. An Animal Sciences advisor is assigned to all students in the Veterinary Technology program. This advisor works with the students to coordinate enrollment in OSU courses required for the B.S. in Agriculture degree with CSCC courses according to a recommended plan. There is also a Veterinary Technology advisor at CSCC who works with students in this dual degree program to develop and coordinate the student's course schedule as part of the admitted cohort and assist them in scheduling CSCC courses.

The College of Food, Agricultural, and Environmental Sciences (CFAES) will requires that students complete an approved minor under the quarter system. The College will continue to require a minor or minor equivalent under the semester system. A minor equivalent has been defined as a group of courses from outside the major that meet the spirit of a minor. Within the B.S. in Agriculture, the Animal Sciences major (Animal Biosciences Specialization and Veterinary Technology Specialization) and the Meat Science major have elected to use the minor equivalent to meet the minor requirement. The CFAES Academic Affairs Committee has approved the minor equivalent for each of the specializations. Some of our students complete multiple minors and we will continue to encourage our students to do so.

<u>B.S. in Agriculture - Meat Science</u> – This major was developed in cooperation with the Department of Food Science and Technology, for students interested in pursuing a career focused on muscle food products. With the increasing changes in food safety, and

advances in meat processing and value-added products and associated equipment, we didn't feel there was enough flexibility to complete the necessary courses (breadth of subject material) by following either the proposed Animal Science Specializations or the B.S. in Food Science. The Meat Science major is a mixture of courses from Animal Sciences, Food Science and Technology, and Meat Science courses, which will allow students to pursue a broad based program and also focus in one of the industry related areas in meat science (growth and development, meat processing, or food safety). During the past ten years, the Animal Science Department has made a concerted effort to enhance the curriculum in the area of Meat Science. In recent years we have placed as many as 10 to 20 students each year either in the industry, or in graduate programs pursuing advanced degrees in Meat Science. Additionally, the Department has multiple endowments, which support scholarships for students interested in pursuing Meat Science, and has recently hired an additional faculty person in the meats area with a significant teaching appointment (80%). With the current and growing interest in the Meat Science program coupled with additional recruiting and available scholarships, we anticipate that approximately 20 to 25 students per year will graduate from this program during its first few years, with the enrollment growing to 40 to 50 students per year within five to six years.

B.S. in Nutrition - Animal Science - Changes in the courses offered in the OSUN program resulted in subsequent revisions to the Department of Animal Sciences program within the B.S in Nutrition. Two courses that were previously included in the animal sciences core for the major were at the 700 level. In the reorganization of the OSUN curriculum, it was decided to increase the rigor of these courses and have them offered as graduate level courses. Therefore, ANIM SCI 761 and 762 (which are transitioning to 7000 level courses) have been replaced with ANIMSCI 5070 - Nutritional Immunology in Animal Systems, and 5530 - Comparative Animal Nutrient Metabolism. ANIMSCI 5070 is the conversion of a course that was developed within the Department in 2009 (ANIM SCI 638), and the ANIMSCI 5530 is a new course that will fill a need for multiple groups of students within the Department, especially those pursuing an emphasis in nutrition, companion animal interest, or professional programs such as veterinary medicine. Additionally, a research methods course has been added (ANIM SCI 3700) to be consistent with the core of B.S. in Nutrition programs offered by Human Nutrition and students will be required to take both the ruminant (ANIM SCI 5031) and nonruminant (ANIM SCI 5032) courses. Previously, students were required to take one of the aforementioned courses, and most students selected the other course as an elective in the program, however, we are requiring both to ensure breadth within the Animal Science Major in the B.S. in Nutrition.

Proposed changes to the minors are as follows:

- <u>Animal Sciences</u> This minor is a straight conversion of the existing Animal Sciences Minor with the exception of adding ANIM SCI 2100 Appreciation of Companion and Production Animals. This is one of two required introductory courses for our Majors and serves as a prerequisite for the second required course.
- <u>Animal Nutrition</u> This minor is a straight conversion of the existing Animal Nutrition Minor with the exception of adding a relatively new course in our Department Nutritional Immunology in Animal Systems (ANIM SCI 5070).

- <u>Equine Science</u> There are minor revisions proposed to the Equine Science Minor. The Equine health course has been changed to an elective within the minor rather than a required course. Additionally, a grazing course and an equine focused study abroad experience have also been included as electives in the minor.
- <u>Animal Pre-Veterinary Medicine</u> This is a new minor structured to provide students who are pursuing a admission to a College of Veterinary Medicine and a career in veterinary medicine through programs outside the Department of Animal Sciences an opportunity to gain additional knowledge and experience with both companion and food animal production systems, health, physiology, and behavior. This minor has been reviewed by the College of Veterinary Medicine and they have supplied a letter of concurrence in support of the minor.
- <u>Meat Science</u> There are minor revisions proposed to the Meat Science Minor. The Food Animal Processing course has been moved from the required category to the elective category, FDSCTE 4536 - Food Safety and FDSCTE 5310 - Food Quality Assurance (new course) have been added as electives. The graduate level growth and development course, animal health course, and microbiology have been removed as these courses were not being used by students to meet the minor, or the material is now being covered in other elective options.

We are also proposing a new program entitled Certificate in Dairy Science. This program is designed to meet the needs of students who have an interest in the dairy industry and desire additional courses, but who do not wish to complete a M.S. During the past two years we have had 5 to 10 students interested in pursuing this certificate and thus, we have offered it via a trial basis, however it was not submitted for approval by the University during the trial phase. The trial program was successful and we believe the number of interested students will increase, but realistically we estimate an annual enrollment of 5 to 15 students per year in the certificate program. As the certificate program is currently proposed, there is the option of having overlap of courses within the major (up to nine credit hours could be used as electives in the major and could also count towards the certificate). None of the courses listed in the Dairy Certificate are options within the minor equivalent of the specializations within the Animal Sciences major; as such there will be no overlap between the certificate and courses used to complete the minor requirement.

Thank you for your consideration of this program plan. Should you have any questions or need additional information, please do not hesitate to contact me.

Sincerely. Jøseph'Hogan

Jøseph Hogan Professor and Interim Chair Department of Animal Sciences

### ANIMAL PRE-VETERINARY MEDICINE MINOR

#### Rationale

The Animal Pre-veterinary Medicine Minor was developed to serve in place of the Life Sciences Minor, which is being withdrawn during the quarter to semester conversion. This minor is structured to provide students who are pursuing a career in veterinary medicine through programs outside of the Department of Animal Sciences an opportunity to gain additional knowledge and experience with both companion and food animal production systems, health, and information related to physiology, form, function, and behavior of multiple species of interest.

Faculty and staff of the Department of Animal Sciences who routinely advise several of our majors who are also pursuing a career in veterinary medicine will conduct advising and administration for this minor. Thus, they are very familiar with the courses available in the minor, the prerequisites and offerings of the courses, as well as the entrance requirements and processes involved with gaining acceptance into a veterinary medicine professional school or program. The minor will not require additional resources or expenses, as the classes involved in the minor are also courses that currently serve students in the animal science curriculum. This minor was developed in with the support and input from the College of Veterinary Medicine and a letter of concurrence has also been provided.

### **Program Learning Goals**

- 1. Develop a greater understanding about the impacts of health on beef, dairy, horse, poultry, sheep, swine and/or companion animal production.
- 2. Apply knowledge to solve problems and to integrate solutions to attain successful companion and production animal management.

### **Program Learning Outcomes**

After completing the Animal Pre-veterinary Medicine Minor students should be able to:

- Be able to describe or provide an overview of the production systems associated with companion and/or food animal species
- Explain nutritional and physiological (digestive system, reproductive system, etc.) differences among companion and/or food animal species
- Explain differences in form, function and behavior among companion and/or food animal species
- Have an awareness of health related challenges both across and among companion and/or food animal species

### Assessment

Direct Measures - Review of feedback and assessment from classes in the minor

- Embedded short answer examination questions
- Regular in-class short writing assignments associated with lectures
- Participation in guided discussion and scenario (e.g., ethics and moral reasoning) analysis/discussion/presentation in small groups during recitation sessions

• Rubrics used in grading written assignments will have subscores addressing this learning objective

Indirect Measures – Review Graduating Senior Evaluation and Feedback

- Student survey
- Student evaluation of instruction

Assessment data will be used to:

- Analyze and discuss trends with the unit's faculty
- Analyze and report to college/school
- Make improvements in curricular requirements (e.g., add, subtract courses)
- Make improvements in course delivery and learning activities within courses
- Make improvements in learning facilities, laboratories, and/or equipment

#### ANIMAL PRE-VETERINARY MEDICINE MINOR

College of Food, Agricultural, and Environmental Sciences The Ohio State University Henry Zerby, Coordinating Adviser 214 Animal Science Building 2029 Fyffe Road 688-4584 Zerby.8@osu.edu

A minor in Animal Pre-Veterinary Medicine is for students who wish to develop a greater understanding about the impacts of health on beef, dairy, horse, poultry, sheep, swine and/or companion animal production. This minor will appeal to students with interests outside the Animal Sciences major who are pursuing a career in veterinary medicine.

Prerequisite Courses for the minor:	Credit Hours
Biology 1113	4

# The Animal Veterinary Medicine minor consists of a minimum of 15 credit hours from the courses listed below

Required:	Credit Hours
ANIMSCI 2200.01 Introduction to Animal Sciences	3
ANIMSCI 3140 Principles of Animal Systems Physiology	3
ANIMSCI 3170 Animal Health	2
ANIMSCI 3270 Animal Immunology	2
Required Electives: Minimum of 5 credit hours	
ANIMSCI 2000 Animal Handling	2
ANIMSCI 3100 Animal Growth and Development	3
ANIMSCI 3130 Principles of Animal Nutrition	3
ANIMSCI 3147 Milk Secretion	2
ANIMSCI 3160 Reproductive Physiology	2

**Restrictions and General Information** 

- 1. The minor is not available to student majoring in Animal Sciences.
- 2. A minimum overall GPA for courses comprising the minor shall be 2.00
- 3. A minor should be declared at the time a student accumulates 60 hours.
- 4. A maximum of one course may overlap between the minor and the GEC (Writing and Communication, Foreign Language, Literature, Visual and Performing Arts, Culture and Ideas, Historical Study, Quantitative Reasoning, Data Analysis, Natural Science, Social Science, Cross-Disciplinary Seminar, Service-Learning, Education Abroad).
- 5. At least six credits must be at 3000 level or above.
- 6. Courses taken on a pass/non pass basis may not be applied to the minor

# FAES Animal Vet Med Minor

# Questions

1. This is a new minor being developed to serve in place of the Life Sciences Minor, which is being withdrawn. Has a withdrawal application being filed for the Life Sciences Minor. Will there be students in the minor who will transition into Semesters?

This minor is not replacing the life sciences minor. Students currently enrolled in the life sciences minor will continue in the minor, however, no new students will be permitted to enter into the life sciences minor. Our College office has a list of the students who are currently in the minor, and has filed a withdraw application for the minor.

2. There is no listing of the number of prerequisites in the table or on the advising sheet. However, it appears that 3170, one of the required courses, has 2200.01 (3 credits) and 2200.02 (1 credit) as prerequisites, which are not listed anywhere; 3170 also requires 3140 as a prerequisite—but 3140 is one of the possible electives! Also, almost all of the courses require some Biological Science course as a prerequisite. While the minor itself is a good one, there needs to be a careful look at the prerequisite structure. We suggest that the proposal be rewritten to show what is really required. The advising sheet needs to reflect reality and the table on the front of the proposal needs to bring the prerequisite hours to something greater than 0.

After reviewing the prerequisite structure for the courses and the minor, we agree that Biology 1113 should be listed as a prerequisite to the minor. We do not foresee this impeding students from enrolling in this minor as students interested in this career path will need to complete courses in Biology to meet the entrance requirements to any Veterinary Medicine program. When our courses were originally entered into the system, we anticipated using Biology 1114 as a prerequisite, however the decision was subsequently made to use Biology 1113, thus we are correcting our prerequisite list accordingly.

To avoid having hidden prerequisites in the minor we have added ANIMSCI 2200.01 to the required course list and increased the credit hours to complete the minor to 15. We agree that it is also logical to include ANIMSCI 3140 in the required list, as it serves as a prerequisite to one of the other courses in the required list. We have removed the series of production courses, as students would already have taken enough courses to complete the minor by the time they would have taken the prerequisites to enter a production course. To provide a little more flexibility to students in the minor ANIMSCI 3100 – Animal Growth and Development has been

added to the list of electives. We have modified our prerequisite structure to our courses and ANIMSCI 2100 will not serve as a prerequisite to ANIMSCI 2200.01 and ANIMSCI 2200.02 will not serve as a prerequisite to ANIMSCI 3130, 3140, or 3160. A current list of proposed prerequisites for each of the courses in the minor is below.

COURSE	PREREQUISITES
ANIMSCI 2200.01 Introduction to Animal Sciences	8
ANIMSCI 3140 Principles of Animal Systems Phys	Bio 1113
ANIMSCI 3170 Animal Health	ANIMSCI 2200.01 or 2300H, 3140
ANIMSCI 3270 Animal Immunology	ANIMSCI 3170
ANIMSCI 2000 Animal Handling	
ANIMSCI 3100 Animal Growth and Development	
ANIMSCI 3130 Principles of Animal Nutrition	ANIMSCI 2200.01 or 2300H, Bio 1113

ANIMISCI 5150 Frinciples of Animal Nutrition	ANIMSUL $2200.01$ of $2300\Pi$ , DI0 1115
ANIMSCI 3147 Milk Secretion	ANIMSCI 2200.01 or 2300H, Bio 1113
ANIMSCI 3160 Reproductive Physiology	ANIMSCI 2200.01 or 2300H, Bio 1113

#### ANIMAL PRE-VETERINARY MEDICINE MINOR

College of Food, Agricultural, and Environmental Sciences The Ohio State University Henry Zerby, Coordinating Adviser 214 Animal Science Building 2029 Fyffe Road 688-4584 Zerby.8@osu.edu

A minor in Animal Pre-Veterinary Medicine is for students who wish to develop a greater understanding about the impacts of health on beef, dairy, horse, poultry, sheep, swine and/or companion animal production. This minor will appeal to students with interests outside the Animal Sciences major who are pursuing a career in veterinary medicine.

Prerequisite Courses for the minor:	Credit Hours
Biology 1113	4

#### The Animal Veterinary Medicine minor consists of a minimum of 15 credit hours from the courses listed below

<u>Required:</u> ANIMSCI 2200.01 Introduction to Animal Sciences ANIMSCI 3140 Principles of Animal Systems Physiology ANIMSCI 3170 Animal Health ANIMSCI 3270 Animal Immunology	Credit Hours 3 3 2 2 2
Required Electives: Minimum of 6 credit hours ANIMSCI 2000 Animal Handling ANIMSCI 3100 Animal Growth and Development ANIMSCI 3130 Principles of Animal Nutrition ANIMSCI 3147 Milk Secretion ANIMSCI 3160 Reproductive Physiology	2 3 3 2 2

**Restrictions and General Information** 

- 1. The minor is not available to student majoring in Animal Sciences.
- 2. A minimum overall GPA for courses comprising the minor shall be 2.00
- 3. A minor should be declared at the time a student accumulates 60 hours.
- 4. A maximum of one course may overlap between the minor and the GEC (Writing and Communication, Foreign Language, Literature, Visual and Performing Arts, Culture and Ideas, Historical Study, Quantitative Reasoning, Data Analysis, Natural Science, Social Science, Cross-Disciplinary Seminar, Service-Learning, Education Abroad).
- 5. At least six credits must be at 3000 level or above.
- 6. Courses taken on a pass/non pass basis may not be applied to the minor

#### **College of Veterinary Medicine**



Administration 125/127 Veterinary Medicine Academic Building 1900 Coffey Road Columbus, OH 43210

> Phone (614) 292-1171 Fax (614) 292-7185

December 3, 2010

Dr. Henry Zerby 122A Fyffe Rd. Columbus, OH 43210

Dear Dr. Zerby,

Thank you for the opportunity to review the Animal Pre-Veterinary Medicine Minor developed by the Department of Animal Sciences. The College of Veterinary Medicine supports the Animal Pre-Veterinary Medicine Minor and believes the minor will appeal to students outside the Department of Animal Sciences interested in pursuing an advanced degree in Veterinary Medicine.

Sincerely,

andu lan

Jean E. Sander, DVM, MAM, DACPV Associate Dean for Academic and Student Affairs