🕂 The University of Arizona.

UNDERGRADUATE EMPHASIS (SUB-PLAN) REQUEST FORM MAJORS WITHOUT EXISTING EMPHASES (SUB-PLANS)

Requests for the creation of a new emphasis requires approval from the school director/department head (managing administrator), college academic dean, Curricular Affairs, Undergraduate Council (UGC), and College Academic Administrators Council (CAAC). Complete this form (for each proposed emphasis) and submit to Martin Marquez (<u>martinmarquez@email.arizona.edu</u>), no later than October 25, 2019 to be considered for inclusion in the 2020-2021 Academic Catalog.

- I. Requested by (College & School/Department): Animal and Comparative Biomedical Sciences/CALS
- II. **Proposer's name, title, email and phone number:** Crista Coppola PhD, CAAB, Assistant Professor of Practice
- III. Degree, major and number of students currently enrolled in the major (include dual majors): 500 students currently enrolled in Veterinary Science
- IV. Total number of students that have completed the major in past 3 years:

Department	Major Plan	Degree	Subplan	2016	2017	2018	2019
Animal & Biomedical Sciences	Animal & Biomedical S	Sciences Total		63	64	63	67
	Veterinary Science	BS	Not Available	62	63	61	66
	Veterinary Science 2	BS	Not Available	1	1	2	1
Grand Total	·			63	64	63	67

V. Minimum number of units required to complete the major (do not include foundation, general education, general electives or supporting coursework):

33 Total major units. (22 major core units and 11 Emphasis units)

VI. Name of the proposed emphasis:

- 1. General
- 2. Applied Animal Behavior
- VII. Campus and location offering-check the campus(es) and location(s) where this emphasis will be offered.

X Main \Box UA \Box Phoenix \Box Distance (type in location(s) below):OnlineBiomedical

VIII. Provide a rationale for the proposed new emphasis. Survey your current majors to provide evidence of student interest in/demand for the proposed emphasis – attach the survey questions and results at the end of this proposal. Write a short summary of the findings of the survey. You may also include external data (Bureau of Labor Statistics, reports/letters of support from relevant bodies, etc.). Curricular Affairs can provide a job posting/demand report by skills obtained/outcomes of the proposed emphasis. Please contact Martin Marquez to request the report for your proposal.

Based on our knowledge of the Companion Animal Industry and the trends we see in the field of Animal Behavior; we believe that an Applied Animal Behavior Emphasis in our Veterinary Sciences Degree program would provide our undergraduate students with educational opportunities that are not available in other degree programs. There are very few undergraduate degree programs nationwide that offer Applied Animal Behavior coursework and students are graduating from Veterinary Science Programs without even a basic understanding of animal behavior principles. This lack of education is concerning because as a society, we have integrated animals into our everyday lives. The most recent data from APPA (2019-2020 data) reports that companion animals present in US households has increased approximately 10% since 1988, companion animals are currently present in approximately 67% of US households, and this number is expected to maintain steady growth. It is imperative to understand how and why animals behave the way they do as we continue to include them in just about every facet of our lives. This understanding is critical not only for the welfare of the captive animal but also for the safety of the individual animal and the human counterparts.

The Animal Behavior Society was the first certifying body for Applied Animal Behaviorists. These ABS Certified Behaviorists are referred to as CAABs (Certified Applied Animal Behaviorists) and their Certification requires a multidisciplinary of formal education from a USDE Accredited institution in subject areas such as Evolution, Ethology, Animal Learning, Behavior Principles, Psychopharmacology, and Counselling. Shortly after the ABS Board Certification, a second group was created after it became apparent that the pet-owning public was in need of professional behavioral help and there was a "deficit" in veterinary training. This group is the American College of Veterinary Behaviorists (DACVBs). Currently there are only 49 CAABs and 80 DACVBs worldwide. Most recently, a third group of Animal Consultants has emerged, this group does NOT require a Graduate Degree but does require an advanced understanding of Applied Animal Behavior. The International Association of Applied Animal Behavior Consultants requires core areas of competency in Behavior Assessments, Behavioral Sciences, Species-Specific Behavior, Consulting Skills and Animal Behavior.

Even with the Board Certified Behaviorists (CAABs and DACVBs) and the Behavior Consultants, there are still very few scientifically trained professionals qualified to address animal behavior concerns and the animal's veterinarian is often the first point of contact. Despite, the veterinarian being the first line of defense against on-going behavior issues, less than half of North American veterinary schools and colleges offer behavior training in their programs. Because of this lack of required training, most veterinarians are not given the opportunity to learn about basic behavior principles and "why" behavior problems might develop. In an open letter written to *Veterinary Medicine* in 2015, Veterinary Behaviorists questioned this lack of behavioral training (see Open Letter, Attachment A).

As seen from historical enrollment for behavior courses already being taught, and from a survey of current ACBS students, Animal Behavior is a highly sought-after topic of interest and students are looking at Behavior as a critical adjunct to their Veterinary Sciences education. Results from a brief survey of ACBS 102L students (Introduction to Animal Sciences; Attachment B), students are very interested in learning more about applied animal behavior and feel that 'a better understanding of animal behavior will be important to their chosen career path (95%). Data from the same ACBS 102L survey showed that students are most interested in learning more about Companion Animal Behavior and Zoo Animal Behavior. The proposed emphasis in Applied Animal Behavior would provide students an opportunity to

choose between Companion Animals or Captive Wild Animals (Primates and other Zoo Animals). Results from a separate survey of ACBS 160 students (Gen Ed: Human and Animal Interrelationships; Attachment C) students are especially interested in learning about the Human-Animal bond and how animals are used in today's society. Previously enrolled and currently enrolled students in ACBS Applied Animal Behavior Classes overwhelmingly agree that advanced education on Animal Behavior has been an integral part of their Degree program and feel they are better prepared for their chosen career path (Attachment D).

Since the beginning of Applied Animal Behavior Courses offered in the School of Animal and Comparative Biomedical Sciences in 2017, there has been a steady increase in student interest. The ACBS Vet Sciences Adviser has seen a growing trend of students inquiring about the offered Animal Behavior classes and inquiring as to how these elective courses would fit within their degree program (Attachment D). Offering an Applied Animal Behavior emphasis for our undergraduate Veterinary Sciences Students will help prepare them not only in their future career choices, whether that be as a Veterinarian, Animal Trainer or Zoo Keeper but it will help them be an advocate for animals in their lives and the lives of those around them.

IX. At minimum, provide two unique learning outcomes for the proposed emphasis. Which courses in the emphasis will Introduce, Practice, and/or Assess the learning outcomes? Use the table below to provide the information. Add rows as needed.

Learning Outcome	Introduced	Practiced	Assessed
Students will be able to identify and integrate	ACBS 311	ACBS 481/ACBS 483	ACBS 482/ACBS
both proximate and ultimate causes to build			484/ACBS 495
a comprehensive understanding of animal			
behavior			
Students will be able to recognize and	ACBS 311	ACBS 481/ACBS	ACBS 482/ACBS
describe species typical, abnormal and		483/ACBS 495	484/ACBS 495
problem behavior in animals			
Students will be able to apply and integrate	ACBS 311	ACBS 481/ACBS 483	ACBS 482/ACBS
knowledge of genetics, environment, early			484/ACBS 495
development, learning and animal cognition			
to interpret and explain individual behaviors			
in an applied setting			
Students will be able to demonstrate how	ACBS 311	ACBS 481/ACBS 483	ACBS 482/ACBS
understanding species typical behavior can			484/ACBS 495
be applied to improve husbandry practices			
and individual animal welfare			

X. Requirements to meet 40% commonality across emphases. <u>ABOR Policy 2-221-c. Academic Degree Programs</u> <u>Subspecializations</u> requires all emphases within a major to share at least 40% curricular commonality across emphases (known as "major core"-courses counting towards major units and major GPA). List the required major core curriculum required of all emphases. Refer to your existing <u>advisement report(s)</u>, if needed. Include the prefix, course number, course title and number of units. Add rows as needed.

<u>Requirement</u> <u>Title/Description</u>	<u>Courses (include prefix, number, title, units)</u>	<u>Minimum units</u> <u>needed to</u> <u>satisfy</u> <u>requirement</u>
Supporting	1. Communications 3 units (AGTM 422,Comm 101/119)	48
Coursework	2. General Biology I 4 units (MCB 181R and MCB 181L or MCB 184)	
	General Biology II 4 units (ECOL 182R and ECOL 182L)	
	4. General Microbiology 4 units (MIC 205a and MIC 205L)	
	5. Fundamentals of Biochemistry 3 units (BIOC 384)	
	 Statistics 3-4 units (MATH 263 or 163, SBS 200, PSY 230* and AREC 239) 	
	7. General Physics I 4 units (PHYS 102 and 181, 141 and 161H)	
	8. General Physics II 4 units (PHYS 103 and 182, 241 and 261H)	
	9. Economics 3 units (ECON 200 or 201a)	
	10. General Chemistry I 4 units (CHEM 151, 141/143, 161/163)	
	11. General Chemistry II 4 units (CHEM 152, 142/144, 162/164)	
	12. Organic Chemistry I 4 units (CHEM 241A AND CHEM 243A, 246A and 247A)	
	13. Organic Chemistry I 4 units (CHEM 241B AND CHEM 243B, 246B and 247B)	
Major Core	1. ACBS 102R (3) Introduction to Animal Sciences	22
-	2. ACBS 102L (1) Introduction to Animal Sciences lab	
	3. ACBS 195F (1) Careers in Veterinary Sciences	
	4. ACBS 313 (3) Principles of Animal Genetic Systems	
	5. ACBS 395A (1)	
	6. ACBS 400A (3) Animal Anatomy and Physiology	
	7. ACBS 400B (3) Animal Anatomy and Physiology	
	8. ACBS 419 (4) Immunology	
	9. ACBS 445 (3) Nutritional Physiology and Metabolic Biochemistry	
	Total major core upper division units required	17
	Total major core units required	22

* PSY230 not allowed for students who test out of Math 112

X. Requirements specific to the proposed emphasis. List the required emphasis core, electives, and any special conditions students must meet to complete the emphasis using the table below. Include the prefix, course number, course title, and units for each course. Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department. Highlight and label (NEW) any new courses that must be developed for the emphasis. Add rows as needed.

<u>Note: a proposed emphasis having similar curriculum with other plans (within department, college, or</u> <u>university) may require completion of a comparison chart. Total units required for each emphasis must be</u> <u>equal.</u>

General Emphasis

Requirement Title/Description	<u>Courses (include prefix, number, title, units)</u>	Minimum units needed to satisfy requirement
Disease Related	6 units from existing list of Disease Related Electives	6
Courses		
Disease or Non-	5 units from the existing list of electives	5
Disease Related		
Courses		
	Total emphasis upper division units required	11
	Total major emphasis units required*	11

Note: General Emphasis reflects the major as it currently stands

Applied Animal Behavior Emphasis

<u>Requirement</u>	<u>Courses (include prefix, number, title, units)</u>	<u>Minimum units</u>
Title/Description		<u>needed to satisfy</u>
		<u>requirement</u>
Emphasis Core	1. ACBS 311, Understanding Dog and Cat Behavior (3)	5
	2. (NEW) ACBS 4xx Case Studies in Applied Animal Behavior (2)	
Emphasis	Complete 6 units from the following list.	6
Electives	 ACBS 481 (3) and ACBS 482 (3) 	
	 ACBS 483 (3) and ACBS 484 (3) 	
	Total emphasis upper division units required	11
	Total major emphasis units required*	11

*All emphases offered for this major must have the same minimum number of units required

XI. Emphasis course/faculty information for existing courses. Complete the table below for all emphasis coursework. You can find information to complete the table using the <u>UA course catalog</u> or <u>UAnalytics</u> (Catalog and Schedule Dashboard> "Printable Course Descriptions by Department" On Demand Report; right side of screen). Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department. Add rows as needed.

Course prefix and number	Title	Course Description	Pre- requisites	Typically Offered (F, Sp, Su, W) and Frequency	Home Department	Faculty members available to teach the courses
ACBS 311	Understanding Dog and Cat Behavior	This course will provide the student with a basic understanding of species typical companion animal behavior and its application in an applied environment. Topics and discussion will focus primarily on domestic dogs and cats in a home environment. The topics covered will include domestication and genetics, developmental periods, learning, emotional states, communication and social systems. A brief overview of common problem behaviors that companion animals exhibit in a home environment will also be explored.	None	Spring, every year	ACBS	Crista Coppola
ACBS 481	Principles of Applied Companion Animal Behavior	In this course students will learn the principles of companion animal behavior for the three most common companion animals in the United States (dogs, cats and horses). Basic principles will be emphasized using real world examples of companion animals in an applied setting. Students will learn about species-specific behavior for each of the three companion animals and how to use this information to improve animal welfare. Topics covered will include mechanisms and function of behavior; proximate and ultimate causes of behavior; the relationship between genetics, environment and behavior; role of animal cognition and learning on behavior; the etiology and manifestation of abnormal/maladaptive behaviors; and the effect of the constrained companion animal environment on behavior.	ACBS 311	Fall, every year	ACBS	Crista Coppola

ACBS 482	Applied Companion Animal Behavior in Practice	In this course students will apply the principles of companion animal behavior for the three most common companion animals in the United States (dogs, cats and horses). Students will learn how to effectively improve animal welfare and improve the human-animal relationship. Course topics covered will include individual behavior assessments, captive environment assessments, behavior modification and environmental management. Students will also learn how to effectively present research findings using graphics and text that is visually interesting and accessible.	ACBS 481	Spring, every year	ACBS	Crista Coppola
ACBS 483	Principles of Applied Primate Behavior and Captive Management	In this course students will learn about the evolutionary history and adaptations of the major groups of primates as a foundation for understanding primate behavior, and assessing normal vs abnormal behavior in captivity. Specifically, students will learn to use their knowledge of the naturalistic ecology, biology, behavior and psychology of nonhuman primates to understand and evaluate behavior of primates and their use in a variety of captive settings, including zoos, research facilities, and sanctuaries. Students will also become conversant with the history and present-day issues and concerns about primates in captivity, including methods of assessing primate welfare, and legislation governing their housing, handling and welfare. Lastly students will explore the major ethical issues and debates surrounding captive primates. Throughout the course, students will be challenged to use their growing understanding as a basis for recommending improvements in primate captive management practices.	None	Fall, every year	ACBS	Dieter Steklis, Netzin Steklis
ACBS 484	Applied Captive Primate Behavior in Practice	In this course students will apply the principles of primate behavior and management to problems commonly encountered in captive settings, including zoos, research facilities, sanctuaries, private collections, and entertainment industry. Specifically, students will be challenged to use their knowledge of the naturalistic ecology, biology, behavior and psychology of nonhuman	ACBS 483	Spring, every year	ACBS	Dieter Steklis, Netzin Steklis

primates and captive management to identify potential solutions to improving the lives of captive primates, so as to be consistent with legal guidelines and to minimize the adverse effects of captive conditions. Students will get the opportunity to directly observe one or more species of captive primates, and learn how to record and assess behavior in the captive setting. As a result, students will have a first-hand understanding of how the		
students will have a first-hand understanding of how the conditions		

XII. Emphasis course/faculty information for NEW courses. Complete the table below. Provide email(s)/letter(s) of support from home department head(s) for courses not owned by your department. Add rows as needed. Add rows as needed.

Course prefix and number	Title	Course Description	Pre- requisites	Status*	Anticipated first term offered	Typically Offered (F, Sp, Su, W) and Frequency (every year, odd years, etc.)	Home Dept.	Faculty members available to teach the courses
ACBS 4xx	Applied Animal Behavior	In Development	481/483	D	Spring 2021	Spring, every year	ACBS	Crista Coppola Dieter Steklis Netzin Steklis

*In development (D); submitted for approval (S); approved (A)

XIII. Using the table below, list each faculty member who will contribute to the teaching of courses in this emphasis and the teaching FTE they will contribute. Add rows as needed.

Course(s)	Name	Department	Rank	Degree	Faculty/% effort
ACBS 311	Crista Coppola	2450-ACBS	Assistant	Doctor of	55%
ACBS 481			Professor of	Philosophy	
ACBS 482			Practice		
ACBS 4xx					
ACBS 483	Dieter Steklis	2450-ACBS	Professor of	Doctor of	20%
ACBS 484			Practice	Philosophy	
ACBS 4xx					
ACBS 483	Netzin Steklis	2450-ACBS	Assistant	Doctor of	20%
ACBS 484			Professor of	Philosophy	
ACBS 4xx			Practice		

- XIV. Special conditions for admission to/declaration of this emphasis explain in detail the criteria to declare this emphasis, including GPA requirements, completion of courses prior to declaration, application process, interviews, etc. These conditions must be approved by faculty governance to be enforced. NONE
- XV. Emphasis productivity provide a detailed plan in the case the emphasis does not attract the number of anticipated students and/or the new courses have low enrollments. Will emphasis courses continue to be offered as described in Section XIII and XIV or will students be offered alternative courses from outside the emphasis as substitutions? Is the department/school/college committed to offering the courses regardless of the emphasis productivity?

If the proposed Behavior Emphasis does not attract the anticipated number of students and/or the new courses have low enrollment, the courses will continue to be offered as described in Section X and XIV. ACBS is committed to offering the courses regardless of emphasis productivity. All of the Behavior Emphasis courses (excluding ACBS 4xx in development) have been offered previously with satisfactory enrollment prior to a Behavior Emphasis being a Vet Sciences degree program option.

- **XVII. Do you want the emphasis name to appear on the transcript?** ⊠ **Yes** □ **No** Applied Animal Behavior only
- **XVIII. Do you want the emphasis name to appear on the diploma?** ⊠ **Yes** □ **No** Applied Animal Behavior only
 - XIX. Anticipated semester and year to launch the proposed emphasis: Fall 2020
 - XX. Number of new faculty hires required to deliver the emphasis: 0
 - **XXI. Budgetary impact** indicate new resources needed and source of funding to implement the proposed emphasis. If reallocating resources, indicate where resources will be taken from and the impact this will have on the students/faculty/program/unit.

None identified at this time

Decision process for approval will include:

- 1) efficiency of course offerings.
- 2) course offerings are appropriate and match the expertise of the faculty.
- 3) evidence of sufficient student demand.
- 4) no major conflict with existing programs.

XXII. Required signatures

Managing Unit Administrator (print name and title):S. Patricia Stock, Director, School of Animal and Comparative Biomedical Sciences

	Hel	
Managing Administrator's Signature:		Date: 10/17/19
Managing Unit Administrator (print name and title):		
Managing Administrator's Signature:		Date:
Dean (print name and title): Michael Hon Dean's Signature: Michael Kool	en Aggarite Date: 10/18/20	Dean
Dean (printed name and title):		
Dean's Signature:	_ Date:	
All programs that will be offered through distance lea The signature of approval does not indicate a commit agreement is a separate process.		
Joel Hauff, Associate Vice President Academic Initiatives Education Administration	and Student Success and E	Executive Director for Online and Distance

Signature: ______

Date:

Note: In some situations, signatures of more than one unit head and/or college dean may be required.

Committee	Approval date
Academic Programs Subcommittee	
Undergraduate Council	
College Academic Administrators Council	

□ Create approval memo

□ Send memo to college/dept and acad_org listserv

Create emphasis code in UAccess, including secondary major emphasis code

Upload approval memo and proposal documents to UAccess

□ Notify acad_org of the plan code creation

□ Notify ADVIP team, include proposers

Attachment A

Open letter to Veterinary Medicine <u>http://veterinarymedicine.dvm360.com/letter-veterinary-medicine-behavior-should-be-strongly-considered-</u> <u>curriculum-veterinary-students</u>

Letter to Veterinary Medicine: Behavior should be strongly considered in curriculum for veterinary students While behavior has come a long way, there's still lots of room for improvement. source-image May 20, 2015 By dvm360.com staff VETERINARY MEDICINE Dear Dr. Miller,

Thank you for the lovely tribute to Bill Campbell and his contribution to the knowledge base of behavior problems in dogs in the December 2014 issue of Veterinary Medicine (Mind Over Miller: A tribute to a pioneer in canine behavior). The teaching of veterinary behavior to students and graduates has come a long way since the 1950s. Most major veterinary conferences offer continuing education sessions in behavior, which are often standing room only. These conferences do provide invaluable information to the attendees, equipping them with the knowledge to, as you rightly stated, "optimally handle patients, to teach the owners, and to enhance the image of our profession from the standpoint of competence, finesse, and humaneness."

While behavior in veterinary medicine has come a long way, unfortunately it has not come far enough. In your tribute, you stated "I am so glad that most of our veterinary schools are now offering students training in animal behavior," which would imply that over 50% of our veterinary schools offer some form of behavior training to students. Did you know that of the 30 veterinary schools on the mainland U.S., only 12 have a board-certified behaviorist on staff? Also, the same number of schools offer an introductory behavior course although only a few have it as part of the required curriculum. Those numbers tell us that less than half of our veterinary schools offer training in behavior at all. Considering that behavior problems lead to euthanasia and relinquishment to shelters at staggering numbers and can directly affect patient care in the hospital, veterinary students today are still left unprepared to prevent, diagnose and manage these cases in practice.

You also mention that "[you are] grateful that there is now board certification in animal behavior for graduates who seek to specialize in that discipline." While this is definitely a move in the right direction, the majority of these graduates pursuing board certification are in private practice, since most veterinary schools do not have a behaviorist on staff or do not allocate enough funding to support a behavior teaching program or residency. Currently, there are 22 of the American College of Veterinary Behavior Residents in a non-conforming program, which means they are not associated with a college of veterinary medicine, and seven residents in a traditional residency program.

For those unfamiliar with what a non-conforming residency entails, it is an extremely difficult program to complete. Veterinarians that choose to pursue a non-conforming residency must attend classes, conferences, and workshops, and spend time in other specialty areas (such as laboratory animal medicine, zoological medicine and large animal medicine to name a few) in addition to seeing approximately 450 behavior cases and completing publishable research, which may or may not be funded by an outside source. To support their non-conforming residency many must work another full-time job in order to pay a mentor to supervise them through their case loads. This makes a non-conforming residency exceptionally challenging for someone to pursue board certification in veterinary behavior medicine.

You mentioned the American Veterinary Society of Animal Behavior in your article. This group is actually not a liaison between its members and the American College of Veterinary Behaviorists but rather a separate entity of veterinarians who have a special interest in behavior and would like to know more, PhDs conducting behavioral research, and Certified Applied Animal Behaviorists. Many diplomates and residents of the American College of Veterinary Behavior are members of this society, and student chapter clubs are present in many of the veterinary schools. The goal is to have an active behavior club in every veterinary school and a collection of speakers for these students.

Behavior should be considered a core curriculum topic, but raising awareness in our veterinary schools can be an uphill battle. Teaching and understanding modern, scientifically proven methods of behavior modification and learning theory is critical for all and their staff members. Knowing how to address misconceptions, misunderstandings and outdated information available to clients is key to this process. Once equipped with this knowledge, veterinarians will have the opportunity to further enhance the human animal bond, improve animal welfare, and ultimately save patient's lives.

We are thrilled that you understand and share our passion for the field of veterinary behavior. It is the hope of all of us in this field that, through our efforts and education of both the public and within the veterinary profession, we will ultimately raise enough awareness and support to establish comprehensive veterinary behavior curriculums at all veterinary schools.

Sincerely,

The Residents of the American College of Veterinary Behavior:				
Colleen S. Koch, DVM	Amy Pike, DVM			
Kelly Ballantyne, DVM	Jeff Nichol, DVM			
Sabrina Poggiagliolmi, DVM, MS	Lorna Reichl, DVM			
Leslie Sinn, DVM, CPDT-KA	Valli Parthasarathy, PhD, DVM			
Andrea Y. Tu, DVM	Stephanie Born-Weil, DVM			
Deborah Bryant, DVM	Jill Orlando, DVM			
Karen van Haaften, DVM	Amanda E. Florsheim, DVM			
Amanda Rigterink, DVM	Christine Calder, DVM			
Elizabeth S. M. Feltes, DVM	Desiree Broach, DVM			
Germain Rivard DVM, IPSAV, PhD	Colleen Wilson, DVM			
Marion Desmarchelier, DMV, IPSAV, DES, MSc, DACZM				
Dre Marie-France Leduc m.v				
Trepheena Hunter, BVSc, MANZCVS (behaviour)				

Veterinarians waiting for American College of Veterinary Behavior residency program approval: Ariel Fagen, DVM Cheryl Kolus, DVM

Applied Animal Behavior Survey ACBS 102L Fall 2019

200 attempts have been completed

Question 1

Do you think having a better understanding of animal behavior is/will be important for your chosen career path?

yes	190	(95 %)
no	2	(1 %)
not sure	8	(4 %)

Question 2

Which species or species group are you most interested in learning more about?

Zoo Behavior	44	(22 %)
Livestock Behavior	23	(11.5 %)
Wildlife Behavior	39	(19.5 %)
Companion Animal Behavior (dog and cat)	72	(36 %)
Equine Behavior	20	(10 %)
l am not interested in learning more about behavior	2	(1 %)

Question 3

Do you plan on enrolling in any of the ACBS animal behavior courses (ACBS 311, ACBS 395B, ACBS 481, ACBS 482, ACBS 483 or ACBS 484) while enrolled at UA.

112 (56 %)

yes

no	10	(5 %)
mayha		
maybe	78	(39 %)

Question 4

Additional comments pertaining to Applied Animal Behavior

Answers

Collapse Responses

- None.
- N/A
- more hands on lab sections woud make for a better class, an example would be the companion animal lab 3rd rotation. We were learning about dog behavior "training another student" why not have us go to PACC and physically work with the dogs. This would have made the laba a lot more interactive and cemented the lecture into our heads! Aswell as the first or second horse lab we could have had the opertunity for a lot more hands on time it would have made the lab more relevant to understanding equine behavior and how to properly interact with equines.
- i am really interested in animal behavior and would love to learn more than just about wildlife. also interested in zoo and equine behavior
- none at the moment
- ▶.
- Very intersting seeing the differnt behaivors
- For my career path, I would like to become a veterinarian. To help my future, I would like to learn as much as I can conerning animal behavior.

- None at this time
- nope
- I really liked the Companion Animal Lectures this semester in 102R and the lab rotation in 102L!

- I feel that this is a topic that intrigued me, so I'll most likely take a class as it also pertains to my major.
- I am intrigued by the topic so I'll most likely take a class on the subject.
- it was not something i thought about before ACBS 102 but i really enjoyed learning about it and I think it is important
- Is studying animal behavior its own track separate from animal science or vet science?
- I really enjoyed learning about the dog behavior and how to properly get them to be reinforced
- N/A
- I think this subject is fascinating and I'm very excited to learn more about it
- no
- I feel that applied animal behavior helps provide better welfare for animals and is entirely necessary in this field.
- Very valuable info to enrich my future vet practice
- I find it very interesting but I changed my major so I will not be going into it deeper most likely
- I do not have any comments, but when is the best time to take these coures?
- Learning about Applied Animal behavior has made me see that some of the thing I was doing as a pet owner were incorrect.
- N/A
- This class made me realize that there are other things I could want to do with my life. I made me so happy and I'm exited to see more about it.
- this class made me realize there are other options for my future, and it makes me happy to know i can be more than just a vet. there are so many ways to help animals.
- Are the ACBS courses semester classes or full year classes?
- I think this is important to learn and we shoud have more opportunities outside the class room to get involved and learn more about it.
- no comments at this time

- ▶ i would also like to learn about livestock and companion animals apart from equine behavior
- I am excited to learn more about animal behavior, especially about training animals: small or large
- None None
- none.
- I think this is a pretty interesting field and it something that I may take into consideration when choosing my career path
- None
- I really enjoy reading about behavior of the animals I think is very interesting and before the class I didn't know about the behavior at all. Also is very important to learn about behavior because we are going to be constantly involved with animals so we have to understand them.
- I really enjoy learning about animal behavior, and I think it is especially important for veterniarans to know about this since we will be working with animals and people for the rest of our lives. By understanding our patient more, the better we will be able to treat that animal and help prevent any futher injuries or sicknesses to that animal in the future.
- N/A
- I would be interested in combining applied animal behavior with veterinary medicine
- Great class to learn more about livestock!
- Overall, I enjoy learning about the applied animal behavior because it gives a good foundation for veterinary medicine and allows for a better understanding of the animals we will be working with.
- ▶ This class has helped reinforce my education from ACBS 483 and 484 with professors Steklis.
- I think it is a very interesting field and that anyone who works with animals can be better at the proffession if they study animal behavior.
- Love the class!
- ▶ n/a
- Animal behavior is so cool and there are so many different ascpects to it!
- none

- less horse
- I am looking forward to learning clicker training
- I would also like to learn about zoo animal and wildlife animals
- N/A
- N/A
- ▶ (:
- The reason why I chose to leanr about livestock behavior is because I've learned a lot about the behavior of cats and dogs in a 2 year vet assisting program and I've learned about equine behavior in a lab. It'll be interesting to learn about the ways livestock show their behavior.
- I find animal behavior really interesting!
- I want to learn more not just about companion animal behavior, but about zoo animals because I am considering being a veterinarian that works with animals in zoos.
- It was very interesting
- None None
- ▶ I appreciate that we discuss animal behavior in the companion animal rotation.
- This has been a very eye opening experience, and has taught me countless things, however it no longer pertains to my major and career path
- I would like to know more about all applied animal behavior, I believe it's important to understand animal behavior especially working with animals. In order to better understand them. After all they aren't humans and can't tell you what they are thinking!
- none
- If you want to work with animals, having a strong understanding of their behavior is absolutely essential.
- None
- seems really interesting
- ▶ n/a

- Nope!
- I like animal behavior. This is actually what I wanted to study when I signed up for animal science
- I think learning about animal behavior will help to know how an animal will react to the situations you may have to put it through. For example loading a horse on a trailer for the first time
- It's very intersting to learn about
- None
- I am very interested in learning about this topic, but I can not fit the classes into my schedule for the upcoming semester. I would like to enroll in them for next year, though.
- N/A
- I enjoy every class
- ▶ Nooo! :)
- I'm curious which class would be best
- I am sincerely very interested din the topic of animal behavior, both pertaining to companion animals as well as zoo animals.
- Changing back to physiology so no further comment
- Each lab was very interesting!
- Course has been a delight
- N/A
- N/A
- N/A
- I am glad I am taking this lab and learning more about animal behavior.
- I do not have any comments to add at this time.
- I think it would be very beneficial to learn.

- None
- N/A
- I also am interested in learning more about zoo behavior as well
- N/A
- I think it would bring more appreciation for working with animals!
- I'm excited to take more animal behavior courses!
- I want to study wildlife and pets behavior
- I consider very important the understanding of the animal behavior. Animals cannot verbally communicate but they communicate in different ways, by understanding their behavior we are more likely to give them the necessary care and enhance their welfare
- Just dogs not cats
- N/A
- none
- N/A
- Companion Animal lab was my favorite section! :)
- I think it is very essential for any career including animals.
- Is understanding animal behavior the same as understanding human behavior? As in is it the same process?
- ▶ I have learned a lot about aninal behavior and has become a possible interest.
- I really enjoy that now animals mentality and nature are being considered since for a stable animal we have to be able to understand its way of thinking and natural needs by history facts.
- This class has been a lot more interesting than I anticipated
- ▶ no:)
- So far in this class I have enjoyed learning about Animal Behavior, especially with the Equine.

- ▶ I feel that applied animal behavior is important in providing wellness for animals in our field.
- I think that learning about Animal Behavior is an important part of being an animal science/ vet science majors
- Learning about the different behaviors at this lab was very beneficial, and provided a small insight into what being a small animal vet and or behaviorist would be like. Thankyou!
- I have yet to choose what type of animal I would like to work and further my studies in. Learning about a variety of animals will help one guide their choice in their carrier.
- Ireally enjoy learning about animal behavior and believe it is an important part of working with animals in general.
- This is very intersting, I feel as though it will be very useful going into veterinary.
- None, thank you! :)
- none
- I would like to learn more about avian and parrot behavior as well. I havent seen anything offered on it but I would like to take a class if it is given.
- I think I would actually really enjoy taking a class on companion animal behavior. :)
- I do not have any additional comments.
- No additional comment.
- I would really love to have an Applied Animal Behavior minor or some sort of degree that I could get in it :)
- I think that I am most interested in the behavior of avian animals. (Such as parrots)
- I thought this subject was quite interesting and gave me a better persepctive of my pets and how they think.
- Talking about animal behavior has made me consider altering my career path to not just scientific but also behavioral/psychological
- N/A
- ▶ n/a
- I find ethology interesting.

- I really enjoyed this subject, however I am changing my major, so I won't be taking anymore of the classes.
- N/A
- none, I enjoy the classes very much
- I've changed my major, but i am still interested in animal behavior.
- ▶ I changed my major to Bio so this Applied Animal Behavior won't help me at all.
- none
- None
- None
- Will we be talking about only companion animals or also wildlife and zoo animals too?
- Very interesting and rewarding course
- ▶ I found this class very interesting and it contained a lot of useful information.
- It's important to learn.
- The dog and cat focus has been helpful
- Enjoyable class
- Behavior is important to learn about their natural behavior and status
- N/A
- ▶ n/a
- very interesting
- no
- I'm interested in taking some animal behavior courses or possible have animal behavior as a minor
- No
- Curious about shadowing and other intern opportunities regarding animal behavior as a future career.

- My favorite class
- ▶ N/a
- Loved this lab!!
- No comments
- there needs to be more equine and or cattle interaction and behavior classes not everyone likes cats and dogs
- none
- Would like to see more wildlife and zoo behavior
- Would love to see some zoological courses added at U of A.
- I need this extra credit :(
- It is a facinating subject, but I'm not entriely sure it would be beneficial to my chosen career to take the behavior classes.
- I love all animal's!! Mostly cat's and dog's and all the house pets, but i DO LOVE ALL THE FARM ANIMAL'S TOO!!
- I've always loved all animals!!!! Wether their farm or house pets!!! They're all great to be around, but i do love inside house pets more!!! I do love all tge farm animals too, they're all cute!!!
- Im interested in the behavior of multiple groups of animals.
- A focus on behavior of wildlife during rehabilitation would be neat.
- Applied Animal behavior is very important because animals are unable to commuicate like humans. If animals are injured or sick they commicate by their body lanugage.
- Iove the class!
- N/A
- amazing class

Attachment C

Survey of ACBS 160 students Spring 2019, n = 218

ACBS Interest

Question 1 Difficulty: 1

If you are interested in taking more courses about animal behavior, what topic would be the MOST attractive to you?

•	Companion Animal Behavior - to learn how to help solve behavioral problems in cats, dogs, and horses.		47	(21.56 %)	
•	Agricultural Animal Behavior- to learn how to reduce stress and increase productivity of cows, sheep, pigs, and chickens.	_	21	(9.63 %)	
•	Wildlife Animal Behavior- to learn how to reduce stress and enhance welfare of captive wild animals in zoos and sanctuaries.		51	(23.39 %)	Averagı Standard De Point Discriminatio
•	Human-Animal Bond- to learn about the emotions and attachment between humans and animals, and how animals can assist people in therapy and other learning activities		78	(35.78 %)	
•	None- I am not interested in taking courses on animal behavior.	_	21	(9.63 %)	

ACBS 160 Spring 2019, n=178

What is a career you might like with animals?



	Zookeeper or Animal Sanctuary Rehabilitator	_	16	(8.99 %)
	Veterinarian or Veterinary Technician	_	29	(16.29 %)
	Animal Trainer or Applied Animal Behaviorist	_	23	(12.92 %)
	Animal Lawyer (animal welfare, pet trusts, dog bites)	-	15	(8.43 %)
-	Zoologist or Wildlife Biologist	_	36	(20.22 %)
	Agricultural Animal Production Specialist	-	10	(5.62 %)
-	Human-Animal Interaction Researcher	-	17	(9.55 %)
-	Animal Journalist or Filmmaker	-	14	(7.87 %)
	Pet Product Invention or Marketing (toys, food, costumes)	-	15	(8.43 %)
*	Pet Services (groomer, acupuncture, massage)		3	(1.69 %)

Attachment D

ACBS Adviser Input

In the perspective of the academic advisor, students have mentioned other alternative routes in the field of veterinary science. Most recently, I have seen a growing trend of students inquiring about the offered Animal Behavior classes and inquiring as to how these courses would fit within their degree program. Having the Applied Animal Behavior Emphasis for the Veterinary Science major provides the opportunity for students to work in a specialized field that may be applied to companion animals, as well as farm and zoo animals. This emphasis can help students begin their interest in working towards a Certification in Applied Animal Behaviorist (ACAAB), gaining mastery in a field that can be beneficial to animal and veterinary settings. Over the past few years, students have gained an interest in working with animals that does not involve animal surgery. This emphasis provides the opportunity for students to broaden their interest in animal science, especially students who do not wish to attend Veterinary Medical School.

Jose Miguel Rodas Academic Advisor I- Veterinary Science School of Animal and Comparative Biomedical Sciences

Student Input

My thoughts on including a behavior emphasis for Veterinary Science program.

The need for a behavior emphasis in *every* pre-veterinary program in colleges around the United States is pertinent. Scholars in both veterinary fields and behavior fields would agree that the curriculum being taught to students seriously lacks the information learned about companion animal behavior and husbandry throughout the past 50 years. Because of this, the way animals are handled in our society has not changed even though we are more aware now than ever on how to properly interact with our companion animals. This is a serious disservice to both veterinary students and animals they will care for in the future. The fact that the University of Arizona is home to one of only about 50 Certified Applied Animal Behaviorist is an amazing opportunity to teach vet students information that will influence every aspect of interacting with animals, especially in a veterinary setting. Learning about behavior gives veterinary students the ability to better empathize with their patients and show compassion. Since becoming a student in companion animal behavior classes, my interest in the veterinary field has dramatically increased. Behavior classes make students ponder their own society they live in and question how their beliefs regarding animals line up with scientific facts. I strongly believe that if the University of Arizona wants to be a leader in giving students the most up to date education, behavior classes should not just be a veterinary science elective. They should be a requirement.

Ali Cox Vet Sciences Class of 2020

When I was working as a veterinary technician, I saw just how many cases we referred to a certified animal behaviorist, and just how many clients follow the misguided directions of Cesar Milan. Unfortunately, the closest DVM/Behaviorist was in Phoenix. Even more unfortunately, the waitlist was often over a month long. Many animals cannot wait that long, especially when the issue is aggression or destruction- two of the most common behavior issues. I saw dogs who had attacked children, cats who chased certain people unprovoked, and dogs who chewed through doors as soon as their owner left the home. Referring was not possible for

them, it was too far and the issues were too severe. We've had aggression cases end in rehoming or end in euthanasia because the behaviorist was not available to them. The importance of behavioral health is only matched by the importance of physical health for these animals. Creating an emphasis program to educate people in this would be great for creating jobs (especially since there are so few board-certified behaviorists around) and creating a better world for the animals and humans we surround ourselves with.

Hayley Duncan UA Veterinary Science 2018 KSU DVM *Candidate* 2023 KSU CVM Board of Ethics Co-Chair

I think having a behavior emphasis in our program is a great idea! I've noticed that that's what most of my employers refer to it as anyways when I explain the classes I've taken to them, so it would be great to actually have it in writing for future students.

Brianna Robles Vet Sciences Class of 2020

As a Veterinary Sciences student who works in a veterinary clinic, I can say with the utmost certainty that having a deeper understanding of animal behavior makes my job easier and safer. Clients also frequently have questions about their animal's behavior that I have been able to answer with confidence thanks to the animal behavior classes that I have taken already. Based on this, a Behavior Emphasis for the Veterinary Sciences program would definitely prove to be instrumental in furthering my career.

Amber Fussell Vet Sciences Class of 2021

I believe that the addition of a Behavior Emphasis at the University of Arizona would be incredibly beneficial. As a student who has become passionate about animal behavior and learned to appreciate the positive impact it can have on animal welfare, I firmly believe that pre-vet students and animal-lovers alike would benefit from better understanding behavior. If we can better understand animal behavior, we may be better equipped to provide enrichment and improved welfare.

Hannah Reilly Vet Sciences Class of 2021