ACADEMIC AFFAIRS COUNCIL

AGENDA ITEM: 4.A (1) (a)

DATE: April 3, 2013

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SUBJECT: New Program – SDSU Minor in Animal Health

South Dakota State University has submitted a proposal for a baccalaureate minor in Animal Health. The proposed minor requires 18 credit hours.

The University believes that students who complete the minor will be better prepared for veterinary school and for other animal-related careers.

The courses in the minor are taught for the University's existing programs. No new resources are needed to implement the minor.

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RECOMMENDED ACTION

Provide comments and concerns to Paul Gough.

South Dakota Board of Regents
New Baccalaureate Degree Minor

University:	South Dakota State University
Title of Proposed Minor:	Animal Health
Degree(s) in which minor may be earned:	B.S. or B.A.
Existing related majors or minors:	Animal Science, Dairy Production, Biology, Microbiology, Biotechnology, Chemistry, Biochemistry
Proposed Implementation (term):	Fall 2013
Proposed CIP Code:	01.0903

University Approval
To the Board and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

President of the University _____ Date _____

After approval by the President, a signed copy of the proposal should be transmitted to the Executive Director. Only after Executive Director review should the proposal be posted on the university web site and the Board staff and the other universities notified of the URL.

1. Do you have a major in this area? _____ Yes X No

2. If you do not have a major in this area, explain how the proposed minor relates to your mission.

South Dakota State University requests authorization to offer a baccalaureate minor in Animal Health. SDSU is designated as the land-grant university in the state of South Dakota with well-established programs in agriculture and biological sciences. (Policy 1:10:2). Animal Health is a critical content area for the State with its strong agricultural focus.

Within the "teaching and advising" goals and mission for the Department of Veterinary and Biomedical Sciences (VBSD), the department is charged with promoting and encouraging students in the Pre-Veterinary program to successfully apply for and gain admittance to a College of Veterinary Medicine (CVM) to further their careers, and to provide skills and resources to enhance their success during their professional education at a CVM.

More generally, the department is also charged with providing leadership and resources for the university in the areas of animal health, infectious disease, and biomedical sciences. This part of the mission can be easily expanded to help provide additional educational encouragement in these disciplines to students not pursuing a professional veterinary education through the use of an awarded minor.

3. How will the proposed minor benefit students?

This minor will benefit Pre-Veterinary students in a variety of academic majors by encouraging them to complete electives in biomedical sciences and infectious disease while at SDSU. These courses

foreshadow much of the professional CVM curriculum. By making at least some areas of study more accessible at the CVM level, the university will be strongly enhancing their eventual success in that curriculum, and as veterinarians and SDSU alumni.

This minor will also benefit students in other animal-related fields by helping to expand their knowledge base in animal health, infectious disease, and basic biomedical sciences.

Many students in the Pre-Veterinary program, as well as majors in biomedical or animal related fields, already complete many of the classes included in this proposed minor. The minor would therefore also recognize and award these students for their effort and acquired knowledge.

4. Provide estimated enrollments and completions in the table below and explain how the estimates were developed.

	Fiscal Years*			
	1st	2nd	3rd	4th
Estimates	FY14	FY15	FY16	FY17
Students in the minor (fall)	20	23	25	27
Completions by graduates	-	20	23	25

* Do not include current year.

Each year for the past 10 to 12 years, the Pre-Veterinary program has roughly 30 students applying for admission to CVMs throughout the region. It is anticipated that roughly 60% of these students (20 students) would already qualify for the proposed minor if it were currently offered. Each year after initiation of the minor, growth of 10 to 15% in participating students, both from additional Pre-Veterinary students and from students in animal or biomedical related majors is forecasted. Completion of the minor degree by graduation is estimated to be equal to participation; the anticipated participating students will be highly achieving students already on track for success in the veterinary profession or in animal industry and biomedical careers.

5. What is the rationale for the curriculum?

Based on input from SDSU alumni who have gone on to professional CVM programs, and either are studying toward or have completed the Doctor of Veterinary Medicine degree, the required courses will provide students with fundamentals in the basic biomedical disciplines of animal anatomy, physiology, disease patterns, and medical nomenclature. Students must also select 9 credits from a list of veterinary science, wildlife, microbiology, health science and biology courses. The elective courses focus on advanced specialized training in infectious disease, physiology, and nutrition which will also help prepare students for their professional education as veterinarians.

The minor as designed will also assist students in animal related majors not pursuing a professional veterinary education who are often attracted to animal health related careers, such as research, development, or marketing of nutrition products, vaccines, and pharmaceuticals. By giving them additional knowledge, skills, and insight in basic biomedical science, animal health, and infectious disease, the University can not only give them additional advantages in the competitive job market, but also enhance their career opportunities once they are placed in such a position.

6. Complete the tables below. Explain any exceptions to BOR policy being requested.

A. Distribution of Credit Hours

South Dakota State University
New Minor: Animal Health

[Minor in Animal Health]	Credit Hours	Percent
Requirements in Minor	9	50
Electives in the Minor	9	50
Total	18	100%

B. Required Courses in the Minor

Prefix	Number	Course Title	New*	Hours
VET	103	Introduction to Veterinary Medicine	N	1
VET	183	Veterinary Medical Terminology	N	1
VET	233	Anatomy and Physiology of Domestic Animals	N	4
VET	403	Animal Diseases & their Control	N	3
		Subtotal, required		**9**

* New: Y= yes, N = no.

C. Elective Courses in the Minor: **List courses that may be taken as electives in the minor. Indicate any new courses to be added specifically for the minor.**

(NOTE: The student will be required to take three (3) of the following courses.)

Prefix	Number	Course Title	New*	Hours
VET	424	Medical and Veterinary Virology	N	3
WL	425	Wildlife Nutrition and Disease	N	3
MICR	433	Medical Microbiology	N	3
MICR	439	Medical and Veterinary Immunology	N	3
MICR	440L	Infectious Disease Laboratory	N	3
HSC	445	Epidemiology	N	3
BIOL	467	Parasitology	N	3
VET	476	Advanced Mammalian Physiology	N	4
		Subtotal, electives		**9**

* New: Y= yes, N = no.

7. What outcomes will be expected for all students who complete the minor? How will these outcomes be achieved?

(a) Gain an understanding of the scope, activities, and nomenclature of the veterinary profession as the pivotal field of study for animal health.
Achieved through VET 103 and VET 183 (required).

(b) Achieve general skills and knowledge in the normal anatomy and physiology of common domestic animals, including cattle, sheep, horses, pigs, dogs, and cats.
Achieved through VET 233 (required).

(c) Achieve general skills and knowledge in the spectrum of diseases that affect the health of domestic animals, together with prevention and control strategies used in minimizing the impact of animal disease.
Achieved through VET 403 (required).

(d) Gain specialized understanding and knowledge in animal health through the completion of three (3) elective courses that focus on infectious disease and/or basic biomedical sciences.
Achieved through elective coursework (see list in 6C above).

8. What instructional technologies will be used to teach courses in the minor? *This refers to the instructional technologies used to teach the <u>new</u> courses in the minor and NOT the technology applications students are expected to learn.*

All required and elective courses proposed for this minor are established courses, and use current and approved instructional technologies. There will be no new courses.

9. Is the University is requesting authorization to provide the minor to students at an off-campus location or by distance delivery? If yes, explain. *If off-campus or distance delivery authorization is not requested, enter "None."*

None

10. Costs, Budget & Resources: Explain the amount and source(s) of any one-time and continuing investments in personnel, professional development, release time, instructional technology and software, other O&M, facilities, etc needed to implement the minor.

No additional costs or resources are anticipated in association with this proposed minor. All coursework for the minor is already provided within existing budget, resources, and FTE. The minor degree program will be coordinated by faculty in VBSD.