

**TEXAS HIGHER EDUCATION COORDINATING BOARD**  
**Summary Notes/Minutes**  
**Animal Sciences Field of Study Advisory Committee Meeting**  
**1200 East Anderson Lane, Board Room**  
**Austin, Texas**  
**April 29, 2019, 1:00 PM – 5:00 PM**  
**April 30, 2019, 8:30 AM – 12:00 PM**

*The webcasts of these meetings are available at the following links:*

<https://www.youtube.com/watch?v=Kz0KWMnMAwk>

<https://www.youtube.com/watch?v=XIt2tKFH-0U>

**1. Call to order and introductions**

Allen Michie called the meeting to order at 1:00 PM.

The following committee members were present:

Chase Runyan, Angelo State University

Dave Cleavinger, South Plains College

Nathan Krueger, Blinn College

Reed Richardson, Texas State University

Mary Weis, Collin College

Kyle Stutts, Sam Houston State University

Coordinating Board Staff present:

Allen Michie, Program Director

**2. Consideration of appointing a recording secretary**

Mary Weis volunteered to serve as recording secretary and was elected by acclamation.

**3. Consideration of election of co-chairs**

Dave Cleavinger (South Plains College) was nominated to serve as co-chair from two-year institutions and was elected by acclamation. Chase Runyan (Angelo State University) was nominated from four-year institutions and was elected by acclamation.

**4. Public testimony**

No one was available for public testimony.

**5. Break for consultation between Coordinating Board staff and Co-Chairs**

The committee recessed for 15 minutes.

## **6. Overview of Field of Study rules and mission – Dr. Allen Michie**

Michie provided an overview of the Fields of Study (FOS) statute, how it is part of a wider range of transfer success initiatives, and how it contributes to the Texas Higher Education Coordinating Board's *60x30TX* strategic plan.

Michie stated the goals of the meeting:

- Review curricula from programs at representative two- and four-year institutions
- Review approved courses in the *Academic Course Guide Manual (ACGM)*
- Decide which lower division courses are necessary for success in upper division courses in a major
- Adjust course objectives and descriptions as necessary
- Balance student freedom with institution priorities
- Create a guaranteed pathway to the degree and minimize the number of excess hours that students take

Michie answered questions about FOS and the approval process.

## **7. Discussion and consideration of the Animal Sciences Field of Study curriculum**

The committee discussed the 6 semester credit hours (SCH) of science courses required in the Texas common core. It was noted that pre-veterinary programs specify the number of SCH required for admission, including the Math courses. The committee discussed whether to require the 3 SCH or 4 SCH versions of the science courses. Kreuger said that 6 SCH is required in the core, but institutions often count the extra 2 SCH of lab courses in the Component Area Option of the core curriculum.

One option discussed would be to have more than one track, one for General Animal Sciences and one for Pre-Veterinary. Richardson argued that both are part of the same degree program, so they should share the same FOS. Cleavinger suggested that the committee establish the General track first and then see if a Pre-Veterinary track is necessary.

The committee discussed Introductory Animal Science (AGRI 1419), and there was consensus to add it to the FOS. There was also consensus to add Livestock Evaluation (AGRI 2321).

The committee discussed the additional Agriculture (AGRI) courses in the *Lower-Division Academic Course Guide Manual (ACGM)*, particularly Introduction to Agricultural Economics (AGRI 2317). It was noted that universities offer similar courses under different names and numbers.

Cleavinger recommended adding a course in Public Speaking, and Stutts recommended a Plant Science or Agronomy course.

Michie said that sub-committees are possible, and the committee would not have to worry about Agricultural Business and Management because it will have its own FOS.

The committee discussed Technical Writing (ENGL 2311) and other writing courses. The committee reviewed the English requirements in existing programs.

The committee discussed Computer courses, including Computers in Agriculture (BUSI 1309), and what is currently required in existing programs. Weis suggested giving students options between several courses.

The committee discussed the Math requirements and the extent to which FOS courses could count for both the FOS and the core curriculum. The committee discussed courses including College Algebra, Statistics, Trigonometry and Linear Systems, Math for Business and Social Science, and Engineering Math. There was consensus to include Statistics, and Cleavinger recommended giving students a choice in Statistics courses.

The committee discussed the Life and Physical Sciences section of the core curriculum. Weis and Runyan recommended both General Chemistry I and General Chemistry II. The committee also discussed whether to require the 3 SCH or 4 SCH version of Introduction to Agricultural Science.

## **8. Adjournment**

The meeting adjourned at 5:00 PM.

## **Day 2: April 30, 2019**

### **1. Call to order**

Cleavinger and Runyan called the meeting to order at 8:30 AM.

### **2. Discussion and consideration of the Animal Sciences Field of Study curriculum**

The committee resumed the discussion of Math courses. Cleavinger said that programs cannot always assume that students come in with Algebra skills out of high school. Weis reaffirmed the importance of Statistics.

Richardson revisited the issue of Livestock Evaluation, saying that it fit better with Agricultural Education than with Animal Science. Cleavinger agreed for the Pre-Veterinary track, but said it was appropriate for the General Animal Sciences track. Stutts said that the course would be an elective at Sam Houston State University.

The committee discussed adding a computer course, particularly Business Computer Applications (BCIS 1305) or Computers in Agriculture (AGRI 1309). Richardson advised to keep the FOS simple. The consensus was to offer students a choice between the two courses.

The committee discussed an Economics course, and the consensus was to add Introduction to Agricultural Economics (AGRI 2317).

The committee discussed having a course for the Communications component of the core, and

the consensus was to add Technical and Business Writing (ENGL 2311). It was noted that the course is required at Texas Tech University.

Cleavinger suggested adding a course in Animal Anatomy and Physiology to the FOS and the ACGM. Committee members pointed out that while it is a 2000-level course at Texas Tech University, it is often offered at the upper-division level at other institutions. The consensus was to leave it out of the FOS.

The committee discussed various Biology courses for the FOS. Krueger said that many transfer students take both Chemistry and Biology, especially if they are transferring to Texas A&M University. Stutts recommended retaining Biology I and removing Chemistry II, and Runyan proposed having one Biology course and one Chemistry course. Cleavinger warned that unless students take Chemistry, they will have difficulties in upper-division courses.

The committee discussed adding Food Science courses. The consensus was to add Principles of Food Science (AGRI 1329) and to offer it as a choice along with Agronomy (AGRI 1407).

A motion was made and seconded to accept the FOS for the Animal Science General Track as drafted. The motion carried.

The committee discussed the relevant Classification of Instructional Programs (CIP) codes to which the FOS would apply. The consensus was that the FOS would apply to all undergraduate programs in Animal Sciences (01.0901.00) and Animal Husbandry and Production (01.0302.00).

The committee discussed a Pre-Veterinary Science track in the FOS. Runyan proposed that it could be the same as the General track with an additional Animal Science course.

The consensus was to add to add Physics II. There was then discussion of Math prerequisites for Physics II. There was also discussion of whether Statistics and Organic Chemistry courses need to be taught at the lower or upper division. There was consensus to add Biology II.

A motion was made and seconded to accept the Pre-Veterinary Science track as drafted. The motion carried.

### **3. Overview of the timeline for public comments and Field of Study approval – Dr. Allen Michie**

Michie stated that the proposed FOS would go out for a 30-day public comment period. Committee members would be given a copy of each comment for a response. If changes are made, the revised FOS would go out for a second 30-day comment period. The FOS curriculum would go before the Coordinating Board's Committee on Academic and Workforce Success committee and the full Board for final approval.

Michie said that there could be a second committee meeting, depending upon the number and nature of the public comments received and whether committee members indicate that they want to make significant changes.

**4. Consideration of authorization of Co-Chairs to approve the meeting notes, make non-substantive edits to documents, and conduct assorted committee business relating to submission of the Field of Study to the Coordinating Board for approval**

A motion was made to authorize the co-chairs to approve the final meeting minutes and carry other related business for the FOS approval process before the Board. The motion passed.

**5. Adjournment**

The meeting adjourned at 11:15 AM.

**Final Proposed Field of Study:**

**Table 1. Proposed 2018 FOS Curriculum for Animal Science: General Track**

<b>Course Title</b>	<b>Course Number</b>	<b>SCH</b>
Choose one of the following: I. Introductory Animal Science (lecture + lab) II: A. Introductory Animal Science (lecture) B. Introductory Animal Science (lab)	I. AGRI 1419 II: A. AGRI 1319 B. AGRI 1119	4
Choose one of the following: I. Business & Professional Communication II. Public Speaking	I. SPCH 1321 II. SPCH 1315	3
Livestock Evaluation	AGRI 2321	3
Elementary Statistical Methods	MATH 1342	3

<p>Choose one of the following:</p> <p>I:</p> <p>A:</p> <ol style="list-style-type: none"> <li>1. General Chemistry I (lecture + lab)</li> </ol> <p>2:</p> <ol style="list-style-type: none"> <li>a. General Chemistry I (lecture)</li> <li>b. General Chemistry I (lab)</li> </ol> <p>B:</p> <p>1:</p> <ol style="list-style-type: none"> <li>a. General Chemistry II (lecture + lab)</li> </ol> <p>b:</p> <ol style="list-style-type: none"> <li>i. General Chemistry II (lecture)</li> <li>ii. General Chemistry II (lab)</li> </ol> <p>2:</p> <ol style="list-style-type: none"> <li>a. Introductory Chemistry II (lecture + lab)</li> </ol> <p>b:</p> <ol style="list-style-type: none"> <li>i. Introductory Chemistry II (lecture)</li> <li>ii. Introductory Chemistry II (lab)</li> </ol> <p>II:</p> <p>A:</p> <ol style="list-style-type: none"> <li>a. Introductory Chemistry I (lecture + lab)</li> </ol> <p>b:</p> <ol style="list-style-type: none"> <li>i. Introductory Chemistry I (lecture)</li> <li>ii. Introductory Chemistry I (lab)</li> </ol> <p>B:</p> <p>A:</p> <ol style="list-style-type: none"> <li>a. Introductory Chemistry II (lecture + lab)</li> </ol> <p>b:</p> <ol style="list-style-type: none"> <li>i. Introductory Chemistry II (lecture)</li> <li>ii. Introductory Chemistry II (lab)</li> </ol>	<p>I:</p> <p>A:</p> <ol style="list-style-type: none"> <li>1. CHEM 1411</li> </ol> <p>2:</p> <ol style="list-style-type: none"> <li>a. CHEM 1311</li> <li>b. CHEM 1111</li> </ol> <p>B:</p> <p>1:</p> <ol style="list-style-type: none"> <li>a. CHEM 1412</li> </ol> <p>b:</p> <ol style="list-style-type: none"> <li>i. CHEM 1312</li> <li>ii. CHEM 1112</li> </ol> <p>2:</p> <ol style="list-style-type: none"> <li>a. CHEM 1407</li> </ol> <p>b:</p> <ol style="list-style-type: none"> <li>i. CHEM 1307</li> <li>ii. CHEM 1107</li> </ol> <p>II:</p> <p>A:</p> <ol style="list-style-type: none"> <li>a. CHEM 1405</li> </ol> <p>b:</p> <ol style="list-style-type: none"> <li>i. CHEM 1305</li> <li>ii. CHEM 1105</li> </ol> <p>B:</p> <p>A:</p> <ol style="list-style-type: none"> <li>a. CHEM 1407</li> </ol> <p>b:</p> <ol style="list-style-type: none"> <li>i. CHEM 1307</li> <li>ii. CHEM 1107</li> </ol>	<p style="text-align: center;">8</p>
<p>Choose one of the following:</p> <p>I. Business Computer Applications</p> <p>II. Computers in Agriculture</p>	<p>I. BCIS 1305</p> <p>II. AGRI 1309</p>	<p style="text-align: center;">3</p>
<p>Introduction to Agricultural Economics</p>	<p>AGRI 2317</p>	<p style="text-align: center;">3</p>
<p>Technical &amp; Business Writing</p>	<p>ENGL 2311</p>	<p style="text-align: center;">3</p>
<p>Choose one of the following:</p> <p>I. Principles of Food Science</p> <p>II. Agronomy</p>	<p>I. AGRI 1329</p> <p>II. AGRI 1407</p>	<p style="text-align: center;">3</p>
<p><b>TOTAL</b></p>		<p style="text-align: center;"><b>33</b></p>

**Table 2. Proposed 2018 FOS Curriculum for Animal Science: Pre-Veterinary Science Track**

<b>Course Title</b>	<b>Course Number</b>	<b>SCH</b>
Choose one of the following: I. Biology for Science Majors I (lecture + lab) II: A. Biology for Science Majors I (lecture) B. Biology for Science Majors I (lab)	I. BIOL 1406 II: A. BIOL 1306 B. BIOL 1106	4
Choose one of the following: I. Biology for Science Majors II (lecture + lab) II: A. Biology for Science Majors II (lecture) B. Biology for Science Majors II (lab)	I. BIOL 1407 II: A. BIOL 1307 B. BIOL 1107	4
Choose one of the following: I. General Chemistry I (lecture + lab) II: A. General Chemistry I (lecture) B. General Chemistry I (lab)	I. CHEM 1411 II: A. CHEM 1311 B. CHEM 1111	4
Choose one of the following: I. General Chemistry II (lecture + lab) II: A. General Chemistry II (lecture) B. General Chemistry II (lab)	I. CHEM 1412 II: A. CHEM 1312 B. CHEM 1112	4
Choose one of the following: I. College Physics I (lecture + lab) II: A. College Physics I (lecture) B. College Physics I (lab)	I. PHYS 1401 II: A. PHYS 1301 B. PHYS 1101	4
Choose one of the following: I. College Physics II (lecture + lab) II: A. College Physics II (lecture) B. College Physics II (lab)	I. PHYS 1402 II: A. PHYS 1302 B. PHYS 1102	4

<p>Choose one of the following:  I. Introductory Animal Science (lecture + lab)  II:  A. Introductory Animal Science (lecture)  B. Introductory Animal Science (lab)</p>	<p>I. AGRI 1419  II:  A. AGRI 1319  B. AGRI 1119</p>	<p>4</p>
<p>Choose one of the following:  I. Plane Trigonometry  II. Pre-calculus Math</p>	<p>I. MATH 1316  II. MATH 2312</p>	<p>3</p>
<p><b>TOTAL</b></p>		<p><b>31</b></p>