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# 2021-2022 Technical Report

Veterinary Educational Assessment  
August/September 2021, January 2022, and May 2022 Test Administrations

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## I. Introduction

The International Council for Veterinary Assessment (ICVA) Veterinary Educational Assessment (VEA) has been developed for schools accredited by the Council on Education of the American Veterinary Medical Association for use as an assessment of basic science knowledge. In addressing this objective, the VEA strengthens the veterinary education process by providing a psychometrically-sound method for assessing student performance on both the individual and aggregate level, both on an annual basis and as a longitudinal measure. Schools will use the score information obtained on the examination for curricular review and assessment purposes.

## II. Test Development

Veterinary Educational Assessment test development is done by the ICVA in cooperation with the National Board of Medical Examiners (NBME). The forms used for the 2021-2022 VEA administrations each contained 200 items and 40 pretest items randomly selected for each examination administration. The blueprint used to construct the 2021-2022 VEA forms is as follows:

Area	Percentage	Description
Anatomy	22%	Includes gross and microscopic anatomy, developmental anatomy, physical examination, and principles of radiology and diagnostic imaging
Physiology	23%	Includes organ physiology, physiological chemistry, genetics, nutrition, and breeding
Pharmacology	14%	Includes pharmacokinetics, pharmacodynamics, therapeutics, toxicology, and anesthesia/analgesia
Microbiology	20%	Includes bacteriology, mycology, virology, parasitology, immunology, diagnostics, and public health [regulatory, epidemiology, and zoonoses])
Pathology	21%	Includes general pathology, gross pathology, histopathology, pathogenesis, and clinical pathology [cytology and data analysis/diagnostics])

The committee of content experts listed in Appendix A oversaw the review process for the examination. Following final approval by ICVA, items and images were transmitted to NBME's web-based vendor, for web-based publication. Quality control procedures were implemented at each stage of the test development process to ensure accuracy and quality of the test materials.

## III. Test Administration

The VEA was administered to 14 schools during the three testing windows for the 2021-2022 examination cycle. A total of 1745 students completed the examination. Schools that participated in the examination are as follows:

**August/September 2021 window:** Auburn University, Michigan State University, University of Missouri, Midwestern University, University of Tennessee, St. Matthew's University, Texas A&M University, Ross University, and North Carolina State University

**January 2022 window:** Iowa State University, University of Tennessee, St. Matthew's University, Lincoln Memorial University, Oklahoma State University, North Carolina State University, University of Pennsylvania, and Ross University

**May 2022 window:** University of Pennsylvania, St. Matthew's University, Ross University, and the University of Georgia.

During all three testing windows, the test administration provided the option of remote proctoring to follow the CDC guidelines of social distancing due to the COVID-19 pandemic.



**Post-Test Survey:** Examinees were asked to complete an optional post-test survey after completing the examination. Results of the survey for each administration were provided to the NBME and the ICVA.

#### IV. Scoring and Analysis

Raw and percent correct scores were computed for each examinee on the total test and each of the five content areas. Percent correct scores for examinees who took the examination in prior years are not directly comparable across forms or administrations. Additionally, equated scores were computed. Summary statistics for all students who took the VEA during the 2021-2022 testing cycle are provided in Table 1.

Feedback was distributed to schools approximately 28 days after the end of the administration. Annual school reports were created and distributed to all schools that used the VEA during the 2021-2022 testing cycle in early August of 2022.

**Table 1. Percent Correct - Means and Standard Deviation for all examinees  
2021-2022 Veterinary Educational Assessment testing cycle**

<b>Total Test</b>	<b>Anatomy</b>	<b>Physiology</b>	<b>Pharmacology</b>	<b>Microbiology</b>	<b>Pathology</b>
55 (11)	56 (13)	56 (12)	52 (14)	54 (14)	55 (14)



## Appendix A

### Veterinary Educational Assessment Examination Committee Members

Dr. Lora Ballweber - Microbiology  
Colorado State University College of Veterinary Medicine, Fort  
Collins, CO

Dr. Linda Berent - Pathology  
Formerly - University of Missouri College of Veterinary Medicine,  
Columbia, MO

Dr. Daniel Brown - Microbiology  
University of Florida College of Veterinary Medicine, Gainesville,  
FL

Dr. David Cross - Anatomy/Microbiology  
University of Missouri College of Veterinary Medicine, Columbia,  
MO

Dr. Abdalla Eljack - Anatomy  
Tuskegee University College of Veterinary Medicine, Tuskegee, AL

Dr. Hilari French - Physiology/Pathology  
Ross University School of Veterinary Medicine, St. Kitts

Dr. Jennifer Ketzis - Microbiology (parasitology)  
Ross University School of Veterinary Medicine, St. Kitts

Dr. Martha Littlefield - Physiology  
Louisiana State University School of Veterinary Medicine, Baton  
Rouge, LA

Dr. Sheba MohanKumar - Anatomy/Physiology/Pharmacology  
Michigan State University School of Veterinary Medicine, East  
Lansing, MI

Dr. Puliur MohanKumar - Anatomy  
University of Georgia College of Veterinary Medicine, Athens, GA

Dr. Jeffrey Musser - Microbiology  
Texas A&M University College of Veterinary Medicine, College  
Station, TX

Dr. Carly Patterson - Pharmacology  
Texas A&M University College of Veterinary Medicine, College  
Station, TX

Dr. Wayne Schwark - Pharmacology  
Cornell University College of Veterinary Medicine, Ithaca, NY

Dr. Cathryn Sparks - Anatomy/Physiology  
Kansas State University College of Veterinary Medicine,  
Manhattan, KS

Dr. Michael Stonerook - Pharmacology/Toxicology/Physiology  
Lincoln Memorial University College of Veterinary Medicine,  
Harrogate, TN

Dr. Maureen Wichtel - Anatomy/Physiology  
University of Prince Edward Island Atlantic Veterinary College,  
Charlottetown, PEI

