

Massachusetts CTE Teacher Testing Program Animal Science Content Outline

Written and Performance Exam General Overview

- The intent of this exam is to assess the candidate's ability to teach the skills found in the Massachusetts Technical Education Framework.
- The written exam is a state-developed exam aligned to the frameworks which can be accessed here. The performance exam is a NOCTI-developed teacher test and has been determined by DESE to align to the state frameworks.
- Many questions and tasks require a synthesis of knowledge based on experience in the field and may not be found in any book.
- Use this exam outline and the Massachusetts Technical Education Framework to focus your preparation for the exams.
- Candidates are encouraged to prepare for their written exam by reviewing textbooks and
 reference material which have been listed as part of this exam outline. These resources can be
 found using online search tools, online vendors, and websites.

Written Exam

Number of Questions: 100Administration Time: 3 hours

Passing Score: 70.0%

Administration Method: Remote Proctored Online Testing Session

Written Exam Content Coverage

	Witten Exam content coverage
7%	Fundamentals of Health and Safety
10%	Animal Science Health and Safety
13%	Fundamentals of Animal Science
12%	Species of Animals, Breeds, and Characteristics
7%	Animal Housing
20%	Comparative Animal Anatomy and Physiology
10%	Genetics, Breeding, and Reproduction of Domestic Animals
10%	Animal Health and Disease
6%	Animal Nutrition, Feeds, and Feeding Practices
5%	Animal Welfare/Animal Rights

Written Exam Reference Materials (Reference Current Edition)

- Animal Science by James Gillespie (Albany: Delmar)
- Modern Livestock & Poultry by James Gillespie (Belmont: Cengage, Delmar Learning)
- Introduction to Veterinary Science by MeeCee Baker & James Lawhead (Belmont: Cengage, Delmar Learning)
- Small Animal Care & Management by Dean M. Warren (Belmont: Cengage, Delmar Learning)
- American Association of Laboratory Animal Science Assistant Laboratory Animal Technician Manual by Timothy P. Lawson
- An Illustrated Guide to Veterinary Medical Terminology by Janet Amundson Romich (Delmar)
- Elsevier's Veterinary Assisting Textbook by Margi Sirois (Mosby)

Materials Needed for the Written Exam

- A four-function calculator is included in the online testing system. No other calculators are permitted.
- Scrap paper and pencil/pen are permitted.

Written Exam Sample Items

Each question on the exam consists of one incomplete sentence or question followed by four choices. Some items reference an image or diagram. A few sample items are included below; the correct answer is designated with an asterisk (*).

Progesterone is produced in the:

- a. corpus luteum. (*)
- b. cervix.
- c. follicle.
- d. uterus.

An animal that has been transformed with foreign DNA is a _____ animal.

- a. dominant
- b. transgenic (*)
- c. niotech
- d. mutant

Performance Exam

- Administration Time: 4 hours
- NOCTI Criterion-Referenced Cut Score/Passing Score: 70%
- Administration Method: Onsite at a DESE approved Massachusetts Area Testing Center (MATC) location. Candidates must register and schedule their exam session through NOCTI.

Performance Exam Content Coverage

67% Safe Handling and Restraint of Small Animals and Livestock

The candidate will demonstrate how to handle and restrain a variety of small animals and livestock and perform/explain grooming procedures according to industry and OHSA safety standards.

13% Identify Healthy and Unhealthy Animals

The candidate will set up and operate a compound microscope.

20% Safety

The candidate will demonstrate safety knowledge and follow all procedures according to OSHA and industry safety standards.

Performance Exam Requirements

Candidate Supplied

Candidates must bring all appropriate Personal Protective Equipment (PPE), attire/uniform, and any other safety items as is routinely expected to be used by an employee in the related industry. If the candidate does not bring what is needed to safely complete all jobs on the exam as required in the workplace, the testing session will need to be rescheduled at the candidate's expense.

Site Supplied

Additional equipment and supplies needed to complete the jobs on the performance test will be provided by the testing site.

Performance Exam Site Requirements

Testing sites may have individual requirements based on location and any relevant and current guidance from the Center for Disease Control and Prevention (CDC).