

# Changes to Test Content

DAT Test Specifications are found in the DAT Guide and outline specific test content details. Any future changes will be outlined within the Test Specifications and posted in December of the calendar year that changes become effective.

| SURVEY OF THE NATURAL SCIENCES (100 items) |   |
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| Biology (40)                               |   |
| Cell and Molecular Biology                 | Origin of life, cell metabolism (including photosynthesis/ enzymology), cellular processes, thermodynamics, organelle structure and function, mitosis/ meiosis, cell structure, and experimental cell biology |
| Diversity of Life                          | Biological Organization and Relationship of Major Taxa (Six-Kingdom, Three-Domain System) – plantae, <u>animalia</u> , <u>protista</u> , fungi, eubacteria (bacteria), archaea, etc.                          |
| Structure and Function of Systems          | Integumentary, skeletal, muscular, circulatory, immunological, digestive, respiratory, urinary, nervous/ senses, endocrine, reproductive, etc.  |
| Developmental Biology                      | Fertilization, descriptive embryology, developmental mechanisms, and experimental embryology  |
| Genetics                                   | Molecular genetics, human genetics, classical genetics, chromosomal genetics, and genetic technology  |
| Evolution, Ecology, and Behavior           | Natural selection, population genetics/ speciation, cladistics, population and community ecology, ecosystems, and animal behavior (including social behavior).  |

# Changes to Test Content: Critical Thinking

- There are many different ways to define the concept of critical thinking. Those definitions often involve the application of cognitive skills such as problem solving, interpretation, analysis, evaluation, and inference.
- Critical thinking is not a specific content area to be mastered, but is perhaps best thought of as a rational, reasoned approach to the processing of information in order to reach conclusions and derive solutions.
- Critical thinking involves information processing, and the type of information that is being processed can vary greatly (e.g., reading comprehension content, quantitative content, science content). In essence, particular content areas provide a platform for the application of critical thinking skills that vary in complexity.
- Critical thinking skills can be assessed either through a separate content section, or through embedding higher cognitive processing requirements within an existing content structure. The DAT Program has taken the latter approach, and chosen to incorporate critical thinking into the DAT's Quantitative Reasoning Test section.

# Changes to Test Content

## Changes to Quantitative Reasoning Test (QRT) Specifications

In the 2016 calendar year, changes will be introduced to QRT to incorporate additional critical thinking into this section. Critical thinking will be embedded in the following areas:

- Data Analysis, Interpretation, and Sufficiency (NEW)
- Quantitative Comparison (NEW)
- Probability and Statistics (more items)

Note: while items have been discarded in certain areas (e.g., Geometry and Trigonometry) the removal of these items does not imply that items in the QRT section no longer require knowledge in those areas. Items written in areas such as “quantitative comparison” and “data analysis, interpretation, and sufficiency” can still utilize underlying content in geometry and trigonometry.

Additional information will be posted at: [www.ada.org/en/education-careers/dental-admission-test#](http://www.ada.org/en/education-careers/dental-admission-test#)