

## Updated OAT Biology Test Specifications – April 2022

Updates to the Optometry Admissions Test Biology test specifications will be implemented in April, 2022. Students who plan to take the OAT during or after April, 2022 are encouraged to review the updated specifications provided below. The updated Biology test specifications include several new topics that were not previously covered on the examination; these new topics are represented in underlined text below.

### **Biology** (40 items)

- I. Cell and Molecular Biology: cell metabolism (including photosynthesis, enzymology), cellular processes (including membrane transport, signal transduction), thermodynamics, mitosis/meiosis, cell and organelle structure and function, experimental cell biology, biomolecules, and integrated relationships
- II. Diversity of Life: viruses, Archaeobacteria, Eubacteria, Fungi, Protista, Plantae, Animalia, and integrated relationships
- III. Structure and Function of Systems: integumentary, skeletal, muscular, circulatory, lymphatic/immune, digestive, respiratory, urinary, nervous/sensory, endocrine, reproductive, and integrated relationships
- IV. Genetics: molecular genetics, human genetics, classical genetics, chromosomal genetics, genetic technology, developmental mechanisms, genomics, gene expression, epigenetics, and integrated relationships
- V. Evolution and Ecology: natural selection, population genetics/speciation, animal behavior, ecology (population, community, and ecosystem ecology), and integrated relationships