

Teaching Biology with zSpace

Learn how to teach biology using applications on your zSpace AIO or laptop. More details for using zSpace Experiences, VIVED Science, zSpace Studio, and Visible Body are provided.



zSpace Experiences



VIVED Science



zSpace Studio



Visible Body



zSpace Experiences can be used to teach about viruses, human health, and lab techniques.

Experiences include:

- Human Response to the Flu (E436)
- Testing for the Flu (E435)
- Exploring Human Response to the Flu (E444)
- Exploring Lab Skills (E443)



VIVED Science models include botany, human anatomy, microbiology, and zoology. VIVED Science can be used to teach dissections, learn the names of parts, compare anatomy of different species, and introduce structure and function. (AP27)

Pre-built sessions in VIVED Science for Classification include:

- Kingdom Eubacteria
- Kingdom Protista
- Kingdom Fungi
- Kingdom Plantae: Fern
- Kingdom Plantae: Ginkgo
- Kingdom Plantae: Ginkgo Leaf
- Kingdom Plantae: Dicot Flower

Tip:

Sessions can be authored within VIVED Science.



zSpace Studio can be used to teach about anatomy, biochemistry, cells and viruses, evolution, and genetics. zSpace Studio includes pre-built activities to introduce, review, and reinforce content.

Anatomy

- Human Anatomy: Circulatory System (A275)
- Human Anatomy: Digestive System (A318)
- Human Anatomy: Nervous System (A051)
- Human Anatomy: Respiratory System (A274)
- Human Anatomy: The Brain (A284)

Biochemistry

- Glucose and Cellular Respiration (A303)
- Hormones and Neurotransmitters (A017)
- Lipids (A022)
- Macromolecules (A109)
- Monosaccharides and Disaccharides (A299)
- Plants and Photosynthesis (A304)
- Proteins (A036)

Cells and Viruses

- Chloroplasts and Mitochondria (A080)
- Meiosis (A246)
- Mitosis (A112)
- Mitosis vs. Meiosis (A213)

Tip:

Activities can be created and modified within zSpace Studio.

Evolution

- Comparative Anatomy (A282)
- Embryology (A251)
- Evolution of Horses (A310)
- Evolution of Whales (A092)
- Taung Child Skull Examination and Mystery (A068)

Genetics

- Are You a Carrier? (A054)
- Crossing Two Traits (A276)
- DNA: Genetic Mutations (A089)
- Fruit Flies (A013)
- Fruit Fly Research (A096)
- Mendel's Pea Plants (A027)
- Mendel's Pea Plants Assessment (A028)
- Mendelian Inheritance and Exceptions (A026)
- Non-Mendelian Genetics (A280)
- Probability and Genetics (A039)
- Sickle Cell Disease (A277)
- Variation of Traits in Fruit Flies (A150)



Visible Biology is a visual guide to biological concepts and processes. Visible Biology includes over 24 interactive models and animations that help instructors teach and students learn.

Cell Types

- Bacterial cells
- Animal cells
- Plant cells
- Human blood cells
 - Red blood cells
 - White blood cells

Genetics

- 3D simulation that coils DNA strands into nucleosomes
- 3D simulation that coils DNA into chromatin to fit inside a chromosome
- Animations about mitosis, transcription and translation

Courseware is Visible Body's web-based teaching and learning platform. Use Visible Biology with Courseware to assign interactive assignments and quizzes, and track student learning. Build your own biology course or customize one of the premade courses to suit your needs.

Cellular Functions

- Animations that explain active and passive transport
- Various types of cells in the human body

Energy

- 3D simulations showing photosynthesis in the plant and inside a chloroplast
- Plant leaf
- Plant cell
- Structures that carry out photosynthesis
- Animation about cellular respiration