



UNO & UNMC
Building Excellence
in Academics Through STEM

uBEATS makes a teacher's job easier

» Content is vetted by university experts

You can rest easy knowing the information is accurate, follows best practices, and aligns with Nebraska State Science Standards and Next Generation Science Standards.

» Save yourself time and energy

Each uBEATS module contains a wealth of information, so there's no more searching to find quality, up-to-date educational materials.

» Easy-to-use teacher guides make integration into curriculum seamless

Each uBEATS module contains a teacher guide, ensuring fast integration into your curriculum.

» Modules are accessible anytime, anywhere

uBEATS is housed online via Canvas, so teachers and students access modules when and where it's most convenient for them.

uBEATS offers free materials for 65 different topics

Educators are continually challenged to keep students engaged beyond the typical classroom experience. However, finding quality, supplemental resources that do so can be time consuming for already busy teachers.

Created by the **University of Nebraska Omaha** and the **University of Nebraska Medical Center**, uBEATS gives teachers access to **up-to-date, interactive online lessons** for grades 6 - 12, each one designed to enhance existing curriculum.

Accessing uBEATS is easy



You complete the brief online registration form.



We register your students into the Canvas course.



You share the course link with your students.



Go online to
unmc.edu/ubeats
to sign up today.

uBEATS is a free resource for educators of grades 6 – 12

Grades 6 – 8

GENETICS

- » Cells & Nucleus Introduction
- » Specialized Cells: Receptors & Responses
- » Plant Genetics
- » Mendelian Genetics Introduction
- » Heredity
- » Human Genetics Introduction

PHARMACOLOGY

- » Structure & Properties of Matter
- » Chemical Reactions

PATHOLOGY & MICROBIOLOGY

- » Cell Structure & Function: Unicellular & Multicellular
- » Organization for Matter & Energy Flow in Organisms
- » Growth & Development: Reproduction & Fertilization
- » Specialized Cells: Sensory Pathways

Grades 9 – 10

GENETICS

- » Human Genetics
- » DNA & Proteins
- » Gene Expression
- » Evolution of Traits
- » Types of Genetic Mutation
- » Cell Division: Mitosis & Meiosis

PHARMACOLOGY

- » Structure & Properties of the Periodic Table
- » Chemical Processes

PATHOLOGY & MICROBIOLOGY

- » Cell Structure & Function: Molecules of Life
- » Growth & Development: Cell Division & Differentiation
- » Human Immune System
- » Viruses: Are They Living?

Grades 11 – 12

GENETICS

- » GMOs in Food
- » Biotechnology
- » RNA
- » Bioethics
- » Cloning

PHARMACOLOGY

- » Pharmacognosy
- » Drug Discovery
- » Intro to FDA Approval
- » FDA Approval
- » Pharmaceutical Compounding
- » Routes of Administration
- » Pharmacology
- » Individualized Drug Therapy
- » Adverse Drug Events
- » Pharmacy Ethics

PATHOLOGY & MICROBIOLOGY

- » History of Medicine/ Pathology
- » Histology of Epithelial & Connective Tissue
- » Blood Components & Cells
- » Cell Adaptation & Death
- » Overview of Immunology
- » Acute Inflammation, Chronic Inflammation, & Tissue Repair
- » Hemostasis
- » Genetic Disorders
- » Overview of Disease with the Most Impact on U.S. Morbidity & Mortality
- » Introduction to Microbiology
- » Bacteria
- » Anti-Bacteria
- » Bacteria in the Human Body
- » Bacterial Culture
- » Parasitology
- » Mycology
- » Virology
- » Neoplasia

All Grades (6 – 12)

CANCER

- » Hallmarks of Cancer
- » Stages of Cancer

CAREERS

- » Careers in Genetics
- » Careers in Medical Imaging
- » Careers in Nursing
- » Careers in Pathology & Microbiology
- » Careers in Pharmacy
- » Careers in Public Health