

Using uBEATS in your curriculum is **easy as ...**

1 You complete the brief online registration form.

2 We register your students into the Canvas course.

3 You share the course link and individual login information with your students.

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

Students earn badges in:

- » Dentistry
- » Genetics
- » Infectious disease
- » Pharmacy
- » Public health



uBEATS offers ready-to-use, vetted materials for educators of grades 6 – 12.

uBEATS is offered through the University of Nebraska Medical Center, ensuring content is accurate, follows best practices and aligns with educational standards. Plus, uBEATS makes it easy for busy educators to find a variety of free materials all in one place.



VERIFIED BY:

- » University of Nebraska Omaha STEM faculty
- » University of Nebraska Medical Center health sciences faculty
- » Omaha STEM Ecosystem (approved resource)
- » Nebraska Department of Education



ENDORSED BY & MEMBER OF:



"I am impressed with the uBEATS program. It is a great resource to help students explore other interests and future careers. Having a program backed by research and developed by leading experts in the medical and science fields

available to our students is an invaluable resource."



Elizabeth Lambert
Instructional Coach
Bellevue Public Schools, Nebraska

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UNO & UNMC
Building Excellence
in Academics Through STEM

uBEATS

What is uBEATS?

uBEATS makes a teacher's job easier

uBEATS is a series of **science and health science e-modules** for grades 6 – 12. The material serves as a companion resource to your core curriculum, providing information on top of what students learn in class.

- » Content is **vetted by university experts**, ensuring the information is accurate.
- » Your students' information is **de-identified and protected** with COPPA safeguards.
- » Easy-to-use **teacher guides** with each module make integration into your curriculum seamless.
- » Modules are **accessible anytime, anywhere** via Canvas.
- » You receive personalized, **instructional support** from our Curriculum Specialist.

Students receive advanced learning – and so much more!

- » The program **ignites their confidence** to pursue higher education and careers in these fields.
- » Students **set themselves apart on college applications**.
- » Students who complete certain modules **earn a digital badge**.

Digital badges let students showcase their accomplishments.

These badges are digital representations of the skills learned and can be displayed on LinkedIn, a digital portfolio or digital resume – ensuring students distinguish themselves from their peers.



uBEATS is a **free, interactive resource** for educators and students of grades 6 – 12

Module Topics

Cancer

- » Hallmarks of Cancer
- » Stages of Cancer
- » Nitrates and Cancer
- » Radon and Cancer
- » Pediatric Cancer

Genetics

CELL BIOLOGY

- » Cells and Nucleus Introduction
- » Specialized Cells: Receptors and Responses
- » Cell Division: Mitosis and Meiosis

GENETICS

- » Mendelian Genetics Introduction
- » Plant Genetics
- » Human Genetics Introduction
- » Human Genetics
- » DNA and Proteins
- » Gene Expression
- » Heredity
- » Evolution of Traits
- » Types of Genetic Mutation
- » RNA

BIOTECHNOLOGY

- » Bioethics
- » Biotechnology
- » Cloning
- » Genetically Modified Organisms (GMOs) in Food

Pathology & Microbiology

BUILDING BLOCKS OF LIFE

- » Molecules of Life
- » Unicellular and Multicellular
- » Cell Division and Differentiation
- » Reproduction and Fertilization
- » Organization for Matter and Energy Flow in Organisms
- » Specialized Cells: Sensory Pathways

PATHOLOGY

- » History of Medicine and Pathology
- » Histology of Epithelial and Connective Tissue
- » Blood Components and Cells
- » Cell Adaptation and Death
- » Immunology Overview
- » Human Immune System
- » Acute Inflammation, Chronic Inflammation, and Tissue Repair
- » Hemostasis: The Process of Preventing and Stopping Bleeding
- » Genetic Disorders
- » Neoplasia: Uncontrolled and Abnormal Cell and Tissue Growth
- » U.S. Morbidity and Mortality Overview

MICROBIOLOGY

- » Microbiology Introduction
- » Bacteria
- » Bacterial Culture
- » Bacteria in the Human Body
- » Anti-Bacteria
- » Aseptic Technique
- » Parasitology: The Study of Parasites and Parasitic Diseases
- » Mycology: The Study of Fungi
- » Virology: The Study of Viruses
- » Viruses: Are They Living?

Pharmacology

CHEMISTRY

- » Structure and Properties of the Periodic Table
- » Structure and Properties of Matter
- » Chemical Processes
- » Chemical Reactions

PHARMACOLOGY

- » Pharmacology: Drug Composition, Properties, and Functions
- » Pharmacognosy: Medicines from Plants and Other Natural Resources
- » Drug Discovery
- » Individualizing Drug Therapy
- » Adverse Drug Events
- » Pharmacology Ethics
- » Introduction to Nanotechnology
- » FDA Approval Introduction
- » FDA Approval Process
- » Routes of Administration
- » Pharmaceutical Compounding

Public Health

- » Introduction to Public Health
- » Introduction to Climate Change
- » Climate and Health
- » Water and Health
- » Sexual Reproductive Health
- » Epidemiology
- » Obesity
- » Vaping Prevention (3-Part Series)

Careers in Health Care

- » Dentistry Careers (3-Part Series)
- » Genetics Careers
- » Nursing Careers
- » Medical Imaging and Therapeutic Sciences Careers
- » Pathology and Microbiology Careers
- » Pharmacy Careers
- » Public Health Careers

Academic Success

- » Efficient Strategies for Learning
- » Growth Mindset (2-Part Series)
- » Optimize Your Learning Experience
- » Preparing for Class
- » Spaced Practice
- » How to Master Exams

**NEW MODULES
ARE BEING ADDED
REGULARLY!**

Visit unmc.edu/ubeats for
the most up-to-date list and
to sign up.