



Implementing “Bring Home the Blue, Not the Flu!” Into the Classroom— Curriculum Standards and Related Information

The following information pertains to the online courses “Bring Home the Blue, Not the Flu!” created by the Center for Food Security and Public Health at Iowa State University’s College of Veterinary Medicine, in collaboration with the Iowa Department of Public Health and with support from the Centers for Disease Control and Prevention (CDC) and the Council of State and Territorial Epidemiologists. Access to the courses and more information is available at www.BlueNotFlu.org.

Content and recommendations to promote healthy behaviors provided in the courses are science- and evidence-based to reduce the risk of disease transmission among animals and people. All reviewing partners ensure content aligns with state and national guidelines and recommendations based on scientific research. Our reviewing partners include the following:

- Iowa Department of Public Health
- Iowa Department of Agriculture and Land Stewardship
- National Pork Board
- Iowa State University Extension and Outreach
- Iowa FFA
- [Iowa 4-H*](#)
- [National 4-H*](#)
- Iowa Agricultural Literacy Foundation
- National Agriculture in the Classroom

*Courses have passed Iowa and National 4-H peer review

The courses are consistent with positive youth development principles and practices and learning methods (Appendix 1). Content within courses also align with the following standards:

- Iowa and National 4-H Program Priorities in healthy living and STEM
- Iowa Core and National Education Standards (Appendix 2)

The courses are also listed within the National Agriculture in the Classroom and Iowa Agricultural Literacy Foundation matrices.

- [Iowa Agricultural Literacy Foundation Matrix](#)
- [National Agriculture in the Classroom Elementary and Middle/High School Matrices](#)

Both courses are fully accessible for learners with disabilities.

Should you choose to incorporate the courses into your classroom or club, we have also developed additional material to aid in your instruction.

- Certificates of completion, provided at the end of each online lesson and at the end of each online course



- PowerPoint versions of the high school course, with comprehensive presenter notes, for an alternative method of presentation
- Learning Goals/Objectives to assist in formulation of test questions
- Keys to Learning Goals/Objectives and Worksheets (password-protected)
- Evaluations for courses and workshops (password-protected)

Courses are also responsive on tablets and mobile devices.



Appendix 1: Positive Youth Development Principles and Practices and Learning Methods

The “Excellence in Exhibition: Preventing Disease in Animals and People” online course teaches the following life skills:

- Health—Living
 - o Healthy lifestyle choices
 - o Disease prevention
 - o Personal safety
- Head—Thinking
 - o Critical thinking
 - o Problem Solving
- Head—Managing
 - o Planning/organizing
- Heart—Relating
 - o Communication

Youth must be **engaged in learning**. After completing the self-paced and self-guided interactive online course, they can apply what they have learned to their own animal projects at home and during exhibitions to build **a safe environment**. Youth also have an **opportunity for mastery** and may use elements of the course or supplemental material to teach other youth, leaders, or exhibition volunteers. Throughout the course, youth have the **opportunity to see themselves as an active participant in the future**, envisioning themselves doing the activities described with their own animal projects. They also have the **opportunity for self-determination**, and are encouraged to set goals for their animal projects as they learn best biosecurity practices.



Appendix 2: Education Standards

Iowa Core Alignment

The content of “Excellence in Exhibition: Preventing Disease in Animals and People” online course aligns with the following Iowa Core Standards:

- Health Literacy 21.0.12.HL.5
 - o Demonstrate behaviors that foster healthy, active lifestyles for individuals and the benefit of society.
- Health Literacy 21.9-12.HL.1
 - o Demonstrate functional health literacy skills to obtain, interpret, understand and use basic health concepts to enhance personal, family, and community health.
- Health Literacy 21.9-12.HL.2
 - o Synthesize interactive literacy and social skills to establish and monitor personal, family and community goals related to all aspects of health.
- Health Literacy 21.9-12.HL.3
 - o Apply critical literacy/thinking skills related to personal, family and community wellness.
- Engineering, Technology, and Applications of Science HS-ETS1-1
 - o Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
- Engineering, Technology, and Applications of Science HS-ETS1-3
 - o Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.
- Engineering, Technology, and Applications of Science HS-ETS1-4

Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.

References

Iowa CORE. Health Literacy. Available at <https://iowacore.gov/iowa-core/subject/21st-century-skills/10/health-literacy>.

National Health Education Standards, 2nd Edition. Joint Committee on National Health Education Standards. 2007. Available at https://sparkpe.org/wp-content/uploads/NHES_CD.pdf.

Next Generation Science Standards. Available at <https://www.nextgenscience.org/topic-arrangement/hsengineering-design>.



National Education Standards

The content of “Excellence in Exhibition: Preventing Disease in Animals and People” online course aligns with the following National Education Standards:

- National Health Education Standards
 - Standard 1: Students will comprehend concepts related to health promotion and disease prevention to enhance health.
 - 1.5.1 Describe the relationship between healthy behaviors and personal health.
 - 1.8.3 Analyze how the environment affects personal health.
 - 1.12.3 Analyze how environment and personal health are interrelated.
 - Standard 2: Students will analyze the influence of family, peers, culture, media, technology, and other factors on health behaviors.
 - 2.5.2 Identify the influence of culture on health practices and behaviors.
 - Standard 3: Students will demonstrate the ability to access valid information, products, and services to enhance health.
 - Standard 4: Students will demonstrate the ability to use interpersonal communication skills to enhance health and avoid or reduce health risks.
 - Standard 5: Students will demonstrate the ability to use decision-making skills to enhance health.
 - 5.5.3 List healthy options to health-related issues or problems.
 - 5.5.5 Choose a healthy option when making a decision.
 - Standard 6: Students will demonstrate the ability to use goal-setting skills to enhance health.
 - Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.
 - 7.5.1 Identify responsible personal health behaviors.
 - 7.5.2 Demonstrate a variety of healthy practices and behaviors to maintain or improve personal health.
 - 7.5.3 Demonstrate a variety of behaviors to avoid or reduce health risks.
 - Standard 8: Students will demonstrate the ability to advocate for personal, family, and community health.
 - 8.5.1 Express opinions and give accurate information about health issues.
- Next Generation Science National Education Standards: Engineering, Technology, and Application of Science
 - HS-ETS1-1: Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
 - HS-ETS1-3: Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics, as well as possible social, cultural, and environmental impacts.



- HS-ETS1-4: Use a computer simulation to model the impact of proposed solutions to a complex real-world problem with numerous criteria and constraints on interactions within and between systems relevant to the problem.
- Career & Technical Education
 - AFNR: Animal Systems Career Pathway
 - AS.07.01 Design programs to prevent animal diseases, parasites, and other disorders and ensure animal welfare.
 - AS.07.02 Analyze biosecurity measures utilized to protect the welfare of animals on a local, state, national, and global level.
- Common Core Connections
 - CCSS.ELA-LITERACY.CCRA.R.4: Interpret words and phrases as they are used in text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.
 - CCSS.ELA-LITERACY.CCRA.R.7: Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words.
 - CCSS.ELA-LITERACY.CCRA.SL.1: Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others' ideas and expressing their own clearly and persuasively.
 - CCSS.ELA-LITERACY.CCRA.SL.2: Integrate and evaluate information presented in diverse media and formats, including visually, quantitatively, and orally.
 - CCSS.ELA-LITERACY.CCRA.SL.5: Make strategic use of digital media and visual displays of data to express information and enhance understanding of presentations.
- National Agricultural Literacy Outcomes
 - T1.9-12 c.: Discuss the scientific basis for regulating the movement of plants and animals worldwide to control for the spread of potentially harmful organisms (e.g., invasive species and disease causing organisms such as foot and mouth disease and avian and swine flu) as well as the methods of control in place (state, national, and international policies, economic incentives)
 - T2.3-5.d.: Provide examples of specific ways farmers meet the needs of animals.
 - T2.9-12 a.: Compare and contrast the differences between nature's plant and animal lifecycles with agricultural systems (e.g., producers manage the lifecycle of plants and animals to produce a product for consumption)
 - T2.9-12 c.: Discuss reasons for government's involvement in agricultural production, processing, and distribution
 - T2.9-12 e.: Identify inspection processes associated with food safety regulations
 - T3.3-5.f.: Identify careers in food, nutrition, and health
 - T3.6-8.h: Identify forms and sources of food contamination relative to personal health and safety.



- T3.9-12 h.: Provide examples of foodborne contaminants, points of contamination, and the policies/agencies responsible for protecting the consumer
- T5.9-12 a.: Communicate how the global agricultural economy and population influences the sustainability of communities and societies
- T5.9-12 d.: Describe essential agricultural careers related to production, consumption, and regulation
- T5.9-12 i.: Explain the role of government in the production, distribution, and consumption of food

References

National Agricultural Literacy Outcomes. Spielmaker, D. M. and Leising, J. G. 2013. Available at <http://agclassroom.org/teacher/matrix>.

National Health Education Standards, 2nd Edition. Joint Committee on National Health Education Standards. 2007. Available at https://sparkpe.org/wp-content/uploads/NHES_CD.pdf.

National Health Education Standards. Centers for Disease Control and Prevention. 2016. Available at <https://www.cdc.gov/healthyschools/sher/standards/index.htm>.

Next Generation Science Standards. Available at <https://www.nextgenscience.org/topic-arrangement/hsengineering-design>.