



IOWA'S WILDEST ADVENTURE

The Blank Park Zoo would once again like to invite educators to professional development opportunities that will be held at Blank Park Zoo in Des Moines on the dates listed below. The workshops are good for one hour of license renewal credit. In light of these strange times, take a break and consider joining us for fun, food, animals, and ideas to use in your classrooms!

This year, we will be monitoring the virus numbers in the area and across the state, and if they are high, we may have to cancel or postpone a workshop. We do have a larger, new facility, which will make safe distancing easier, and will notify participants as soon as possible. Fingers crossed that things will improve!

Participants in our workshops engage in relevant inquiry investigations that are connected to the Iowa Core and Next Generation Science Standards, learn research-based instructional practices, and gain knowledge and ideas that will be useful in their classrooms. Lessons are flexible, allowing teachers to adjust for their students' abilities; and relate to all age groups in several subject areas (science, literacy, mathematics, social studies, and the arts).

By attending one or more of these workshops, teachers will be eligible to schedule a free classroom animal program. Our education department is willing and able to travel to districts across the state with our classroom programs (animals included!). Our classroom programs are connected to the Iowa Core in Science may be also adjusted to meet social studies and language standards or other curriculum needs of individual classrooms. Depending on the status of the coronavirus, programs may be done via Zoom or other electronic means.

Workshop Descriptions:

Ecosystems –Ecosystems are comprised of living and non-living factors linked together through nutrient cycles and energy flows, including predator/prey relationships; survival mechanisms; and water, carbon, and nitrogen cycles.

In this workshop, participants will learn about interactions in ecosystems and how to build and maintain an ecosystem using common, easily obtained materials. Workshop strategies will include a phenomenon and driving question and will highlight the practices, cross cutting concepts, and engineering principles in the Next Generation Science Standards. Concepts presented in this workshop best fit grade levels 5-12.

Habitats and Adaptations - This course will specifically focus on animal adaptations and different habitats. Lessons are flexible, allowing teachers to adjust for their students' abilities; and relate to all age groups in several subject areas.

Investigations utilize art, math, geography and live science to explore ecology. The lessons are designed to motivate students, encourage critical thinking, and make learning fun.

Wild Genes – Participants explore genetic diversity in plants and animals, learn about the Association of Zoos and Aquariums' Species Survival Program, and meet some families of animals here at the zoo. While genetics content is generally presented in middle and high school, we will be showing how concepts at the elementary level articulate to upper grades. Activities will focus on grades 3-12

Biomimicry and Inspiration –Biomimicry is a growing field of scientific inquiry and technological application to the real world. It can inspire students' interest in science, the natural world, and the built environment while teaching skills in observation, research, and critical thinking.

Participants will engage in activities introducing biologically inspired technology, why it is important (and fascinating!), and provide them with opportunities to research their own solutions to human or environmental challenges. This workshop is aligned with the Next Generation Science Standards, particularly those regarding engineering solutions.

Zoo Structure and Design – Educators will learn about the structure of Blank Park Zoo, including its history, present state, and future plans. Experiences in several parts of the zoo will allow participants to gain a deeper understanding about what it takes to provide for the needs of animals in captivity. Activities will include designing a zoo exhibit that demonstrates knowledge of species habitats, adaptations, and requirements, and utilizes engineering practices found in the Next Generation Science Standards.

Wonders of Water - Participants will explore the physical properties of water, various water habitats, and water related conservation concerns. Activities will include water testing, comparisons of various water habitats and the organisms that depend on them, examination of current water issues and concerns, and engagement in lessons to be utilized in the classroom.

Cost: \$25.00 to help cover materials and meals, payable to Blank Park Zoo online; plus AEA credit fees (information regarding AEA registration will be sent to participants prior to each class).

Included in workshop: Meals (dinner Friday, breakfast and lunch Saturday); materials for teachers to utilize in their classrooms, and an opportunity to schedule a free classroom visit or program at the zoo.

Academic year workshops run 4:00-9:30 pm on Friday and 8:30 am-5:00 pm on Saturday. They will be held either in the new Zooplex or the Discovery Center conference rooms.

Class dates and topics:

Academic Year 2020/21 – All held at Blank Park Zoo, Des Moines, IA

October 2/3, 2020 – Ecosystems

November 20/21, 2020 – Habitats and Adaptations

January 22/23, 2021 – Wild Genes

February 26/27 – Biomimicry and Inspiration

April 9/10 – Zoo Structure and Design

Late April, 2021; final date to be determined and will be posted on the website – Wonders of Water

Registration forms may be found on the zoo website – www.blankparkzoo.com under Education/Just for Teachers. They may be submitted electronically.

Participants should contact Kathy McKee at 515-974-2557 or kamckee@blankparkzoo.net after September 1, 2020 if they have any questions.

We look forward to working with you!

Kathy McKee

Professional Development and Curriculum Coordinator, Blank Park Zoo

515-974-2557

kamckee@blankparkzoo.org