



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 on the dates listed below. The workshops are good for one hour of license renewal credit.

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 or language standards or other curriculum needs of individual classrooms.

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 build and maintain an ecosystem using common, easily obtained materials. Concepts presented in this workshop best fit grade levels 5-12.

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.

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.

Habitats and Adaptations - Educators will experience activities and investigations that we have adapted from several nationally accredited resources, including the Wildlife Conservation Society (Habitat Ecology Learning Program), NSTA and the Council for Environmental Education. These resources utilize art, math, geography and live science to explore ecology. The lessons are designed to motivate students, encourage critical thinking, and make learning fun. This course will specifically focus on plant and 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.

Nature-centered Science for PreK-2 (New Course!) – This course will engage participants in science investigations focused on nature and conservation and introduce them to the concept of Nature Play, where they will take away resources/ideas for nature activities, discover the developmental value of playing outside and how such opportunities help children build skills needed for STEM learning, and learn ways to incorporate nature play opportunities indoors. Art, language arts, math, and social studies will be integrated throughout.

Lamarck, and Wallace, and Darwin – Oh, my! (New Course!) – Evolution is the foundation for modern biological understanding and has a prominent place in the Iowa Core for science and the Next Generation Science Standards. In this course, educators will examine major evolutionary concepts, misconceptions about evolution, and how to address obstacles to teaching evolution.

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

Included in workshop: Meals (dinner on Friday night, Breakfast and lunch on Saturday during academic year); 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 will run Friday from 4-9:30 and Saturday from 8 – 5:30

Dates and Topics:

Academic Year 2018/2019

September 28/29, 2018 - Ecosystems

November 2/3, 2018 – Zoo Structure and Design

November 30/Dec 1, 2018 – Biomimicry and Inspiration

January 18/19, 2019- Habitats and Adaptations

February 22/23, 2019 - Nature-centered Science for PreK-2

April 5/6, 2019 – Lamarck, and Wallace, and Darwin – Oh, my! Evolution for Educators

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 if they have any questions.

We look forward to working with you!

Kathy McKee

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