# STEM at the Zoo

## ZooMS Workshop for Informal Educators

**APRIL 25–27, 2016**



### ENHANCE AND EXPAND STEM PROGRAMMING AT YOUR INSTITUTION!

Join us this spring for a three-day workshop held at the Minnesota Zoo. This professional development opportunity is offered to informal educators from zoos and aquariums that are looking to expand their institution's STEM programming and implement the ZooMS model, our own zoo-based integrated STEM program. We will explore the role of zoos and aquariums in providing high-quality, conservation-focused STEM education, give examples of the programming we offer through ZooMS, and provide tools and resources that you can take back to your home institution.

### OVERVIEW OF ZooMS

Through the Minnesota Zoo's Math and Science (ZooMS) Program, participants discover just what it takes to engineer a modern zoo. With strong emphasis on conservation, ZooMS provides the opportunity to apply important science, technology, engineering, and math (STEM) concepts to real world situations using the Minnesota Zoo as a context for learning. Through topics such as Engineering FOR Animals (exhibit design), Engineering FROM Animals (biomimicry), and Engineering BY Animals (animals as engineers), participants are challenged to consider and tackle the complexities in both the natural world and constructed environments. The ZooMS professional development program shows educators how to integrate standards-based ZooMS resources, design challenges, and field trips into their curriculum to better equip students with the STEM skills to engineer and problem- solve just like zookeepers, exhibit designers and conservationists at the Minnesota Zoo.



### WORKSHOP OBJECTIVES:

1. Define integrated STEM education and describe how zoos and aquariums can provide authentic STEM learning experiences.
2. Give examples of activities and areas of study for each of the three prongs of the ZooMS program: engineering by animals, engineering from animals, and engineering for animals.
3. Gain tools and resources to implement the ZooMS program, specifically the ZooMS Design Challenge—an authentic, zoo-based, long term, integrated STEM project at your own institution.

## ABOUT THE MINNESOTA ZOO

Opened in 1978, the Minnesota Zoo is home to more than 4,700 animals—many endangered—in award-winning exhibits. Located on 485 rolling acres in Apple Valley, Minnesota, the Zoo features miles of outdoor trails and the largest indoor interconnected zoo exhibits in the country. As the largest environmental learning center in the state, the Zoo serves nearly a half million students annually through its innovative and engaging conservation education programs.

## REGISTRATION

| | Fees | Deadline |
|---|---|---|
| **Early Bird Registration** | $550 | **February 15th, 2016** |
| **General Registration** | $650 | **April 1st, 2016** |

### Registration fees include:

- Daily access to the Minnesota Zoo
- Breakfast and lunch each day
- Group dinner at a popular Minneapolis restaurant
- Round trip shuttle transportation between hotel, zoo, and to group dinner
- Behind the scenes experiences and private lectures
- Hands on integrated STEM activities and take home ZooMS Design Challenge resources.

To register, visit **mnzoo.org/stem**. Registration and payment must be completed online. Payment by credit card is due at the time of registration.

## LODGING/TRAVEL

### JW Marriot Hotel Mall of America

A block of rooms has been set aside at the area's newest hotel, just steps from the Mall of America, for a group rate of $169/night. Located halfway between the Minnesota Zoo and downtown Minneapolis, guests can explore all that the twin cities have to offer with easy access to the Minneapolis light rail. Guests may reserve rooms by calling 1-888-236-2427 and asking for the Minnesota Zoo room block rate. The cutoff date for guests to reserve at the special group rate is **Friday, April 1, 2016**.

*The workshop kicks off at 9 am CT Monday and concludes at 3:30 pm CT on Wednesday. Please plan your flights accordingly.*







MINNESOTA ZOO ZOOMS!

For more information, contact:
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