

# Demonstration Program Information

NIU's STEM Outreach program offers a variety of exciting demonstration programs designed to engage and amaze students of all ages! We have high-energy demonstrations to suit any grade level from pre-K through High School. STEM concepts are brought to life using exciting phenomena like liquid nitrogen, plasma globes, lightning machines, lasers, and diffraction-lensed rainbow glasses. Ideas are presented in an engaging and age-appropriate manner designed to help students make real-world connections to the material, while also being entertaining and interesting.



## About the Presenters



### **Jeremy Benson**

Jeremy Benson serves as program designer and lead presenter for NIU STEM Outreach's demonstration shows and hands-on events, as well as being director of NIU's residential summer STEM camps. He holds Bachelors degrees in Communications and Physics Education, and is a certified secondary education teacher with an emphasis on middle school physical science.

### **Pettee Guerrero**

Pettee Guerrero is probably one the most enthusiastic people on the entire planet, and she loves sharing her passion with her students. Pettee is the director of our popular STEM Divas program, as well co-director of our summer STEM camps. She holds degrees in Engineering and Industrial Management Technology.



## Booking

To schedule a day of exciting and engaging science presentations at your school, please contact NIU STEM Outreach by email or phone at:

**Email:** [STEMOutreach@niu.edu](mailto:STEMOutreach@niu.edu)

**Phone:** (815)753-0533

Please be ready to provide the following information when you contact us:

- Name and address of school
- Number and grade level of students participating
- Type of show(s) desired. (See reverse for more info on show offerings)
- Preferred dates/times for presentations
- Contact info for the school principal as well as the person making the request.
- Please be aware we will require 45-60 minutes to set up before the first presentation.

# Show Information and Pricing

## It's Not Magic, It's Science

### *Grades K-2*

This program is designed to capture the imagination of younger students with amazing demonstrations that look like magic, but are really science! We discuss how important skills like being observant, asking questions, and doing experiments, can be used to unlock the secrets behind a magic trick, or to uncover the wonders of the world around us. Each presentation runs approximately 30-45 mins.

## STEM Energy Roadshow

### *Grades 3-5*

Our STEM Energy Roadshow collects some of our most popular demos into an exciting presentation designed to engage and inspire budding scientists and engineers. This program focuses on concepts relating to energy and it's different forms, and uses experiments dealing with liquid nitrogen, light & lasers, and high voltage electricity to show how energy can move from place to place or change from one type to another, but can never be created or destroyed. Each presentation runs approximately 45-60 mins.

*Please inquire for more info on shows for High School Students.*

## Middle School Topics

### *Grades 5-8*

For middle school students, we offer the opportunity to delve even deeper into some of our favorite STEM subjects. Middle school presentations can include up to three topics per show, allowing it to be aligned with the material that is most relevant to you and your students. Entire presentation runs approximately 45-60 minutes. Topics include:

- Temperature & Pressure with Liquid Nitrogen
- Light & Lasers\*
- Acoustics & Sound
- High Voltage: Electricity & Magnetism\*
- Forces & Motion
- Energy & Waves (Combined Light & Sound)\*
- Engineering & Design

*\* Light and Laser, High Voltage, and Waves topics all require a room that can be darkened during these modules.*

### **Important Note:**

***Please be aware that all of our presentations may include sudden loud noises and flashing lights. A limited number of headphones are available upon request.***

## The BIG Show

### *Grades 3-8*

While we always prefer the increased student engagement provided by our smaller shows, we realize that it is not always possible to fit multiple presentations into your school's busy schedule. The BIG show is a larger scale, multi-media presentation intended for audiences larger than 150 students. This program focuses on many of the same concepts presented in our High-Energy Physics Roadshow, and includes a sound system, projector and screen to make it accessible to larger groups. This presentation requires double the setup time of our other presentations, as well as an auditorium or gymnasium with bleachers. Each presentation runs 75-90 mins.

## **Pricing**

Single Presentation (not including The BIG Show) - \$300

Additional Shows - \$100 each (Same day only)

PA Fee (For audiences larger than 100 students) - \$50

Additional Travel Fee (For schools more than 75 miles from NIU) - \$50

The Big Show - \$500