SDNB STEM Camp

Dates: July 24-28, 2017

Location: New Berlin Eisenhower

Registration dates: April 3– May 5, 2017

- Parents can register online through Infinite Campus or by paper form.
- Paper forms should be submitted to Orchard Lane Elementary School, % Larry Lueck, 2015 S. Sunnyslope Road, New Berlin WI 53151

Description: STEM Camp is a week-long enrichment option offered by the School District of New Berlin. The sessions are designed to give students an opportunity to explore STEM related content (Science, Technology, Engineering and Mathematics). Students who will be entering grades 5-12 next school year can participate in STEM Camp. Students who sign up for a weeklong session will be able to connect learning experiences during the camp to middle school and high school level coursework in various programs of study.

This year, sessions will be offered as half day options. This will allow for students to sign up for one **or** two of the weeklong sessions. Each session *may* be offered in the AM (9:00 - 11:30) or the PM (12:00 - 2:30) depending on overall enrollment. Student schedules will be confirmed and communicated to families by June 1, 2017.

On the last day, students will be showcasing their projects from the week. Parents are invited to come in from 10:30 - 11:30 for Session 1 and from 1:30 - 2:30 for Session 2.

Hours: 9:00-2:30 (Students should bring lunch if they are staying for both Session 1 and Session 2)

- Session 1 - 9:00 - 11:30
- Session 2 - 12:00 - 2:30

Fees: $50.00 per session (Full day - 2 sessions = $100.00)

- Fees will be assigned to families when schedules are made available (by June 1, 2017)
- Some courses have an additional $20.00 free
    - 3D Modeling and Printing
    - CSI
    - Chemistry Fun
    - Design Challenge
    - Exploring Aerospace and Aeronautics

3D Modeling and Printing
Grade Incoming 9, 10, 11, 12
Additional Fee $20
Limited to 20 students
This course is designed for students to work hands on with Inventor software to design a model of a 3D item. By the end of the course, students will have created their 3D model via the MakerBot 2X Replicators.

Advanced Video Creation Using Adobe Premiere
Grade: Incoming 9, 10, 11, 12
Limited to 20 Students
Ready to learn the basics of filming and editing? Shoot with pro-level cameras and see how much fun creative editing can be with the drag-and-drop power of Adobe® Premiere®. Take home a DVD of your final project to show your family and friends.

App Builder
Grade Incoming 7, 8, 9, 10, 11, 12
Limited to 20 students
Even with no prior experience, you can learn to build apps within hours. We will start with the basics then lead you through the development of successively more complex apps, teaching programming concepts as you go.

Beginner Movie Creation
Grade Incoming 5, 6, 7
Limited to 20 students
For children ages 10 to 14. In this course, students will use photo and Movie Maker software and write original scripts, capture and manipulate photos, film video segments, and put them together to create their own films.

Chemistry Fun
Grade Incoming 7, 8, 9, 10, 11, 12
Additional Fee $20
Limited to 20 students
Chemistry is the investigation of substances and how they interact, combine, and change. If you like to experiment, this course is for you! Students learn safety and other lab techniques and then put these skills to work in various lab experiments throughout the week. This course is hands-on and exciting!

CSI
Grade: Incoming 7, 8, 9, 10, 11, 12
Additional Fee $20 fee
Limited to 15 Students
In this course, students will learn what it takes to be a real crime scene investigator by conducting research, finding clues and gathering evidence, and making conclusions about a simulated crime.

Design Challenge
Grade Incoming 7, 8, 9, 10, 11, 12
Additional Fee $20
Limited to 20 students
Do you like to build, invent, tinker and/or learn new skills and expand your mind? We will focus on completing daily design challenges. Use your creative thinking to construct solutions from everyday objects to complete each mission.

Digital Designing
Grade Incoming 7, 8, 9, 10, 11, 12
Limited to 20 students
Have you ever considered what it would look like to design things using programs like Adobe Photoshop, Fireworks, Illustrator, or Flash? In this class, use these powerful tools to design logos, animations, graphics, and pictures to make interesting designs.

Digital Music Composition
Grade Incoming 7, 8, 9, 10, 11, 12
Limited to 20 students
Use digital programs to channel your creative side by composing and arranging your own masterpiece. Applications allow you to try several instruments and styles and score and mix your own music.

ER Camp

Grade Incoming 7, 8, 9, 10, 11, 12

Limited to 20 students

Students are introduced to basic first aid and response to emergency situations, the types of trauma, and their outcomes. Students learn how to take vitals and locate evidence of trauma all while practicing team problem solving in various scenarios.

Exploring Aerospace and Aeronautics

Grade Incoming 7, 8, 9, 10, 11, 12

Additional Fee $20

Limited to 20 students

In this course, students will work with teachers to study the design and characteristics of aircraft and rockets. Through a series of investigations designing gliders, rubber band powered airplanes, and sport rockets students will learn about lift and thrust, stable flight, and flight controls. During the week students will also investigate the fields of aerodynamics and aerospace engineering.

Game Coding

Grade Incoming 7, 8, 9, 10, 11, 12

Limited to 20 students

In this course, students will learn to use game coding software to create and play their own computer games. No programming experience is required, yet students will create many different kinds of games as well as learn more about the features that make games fun, playable, and challenging.

IT Hardware

Grade Incoming 5, 6, 7, 8

Limited to 20 students

Explore the components of various computer hardware as you tear apart and rebuild desktops, laptops, and tablet computers.

Lego Robotics

Grade Incoming 5, 6, 7

Limited to 20 students

For children ages 10 to 14. This session will inspire imaginations and challenge minds. The course uses LEGOs as a fun tool to explore robotics, mechanical systems, electronics and programming. Students will work in teams of four with the same robots used in the First LEGO League competition.

Robotics

Grade Incoming 7, 8, 9, 10, 11, 12

Limited to 20 students

In this course, students will be exposed to the principles of automation and robotics and explore how these techniques affect current society. Specific use of district robotics kits and programming software will be utilized.

Virtual Reality using Aurasma

Grade Incoming 5, 6, 7

Limited to 20 Students

For children ages 10 to 14. Interact with the real world through augmented reality. This app allows students to create an augmented reality that comes to life. Students will create their own auras, videos, and interactive stories with waypoints and hidden clues to travel through a virtual adventure.

Webpage Design

Grade Incoming 7, 8, 9, 10, 11, 12

Limited to 25 Students

If you enjoy using online tools and designing your own space - this is the course for you. Students are exposed to a variety of web 2.0 tools to develop a webpage or digital scrapbook.