The distribution of this information and materials through the school district does not imply District 203 endorsement

# **PYTHON AND PYGAME VIDEO GAME DESIGN CAMP**

July 24-28. Day. Grades 5-9. Learn to develop your own video games using the Python programming language and Pygame, a free and open source library for making multimedia application-like video games. 317-762-8727 or dcl@niu.edu.

# **CREATIVE WRITING**

July 24-28. Day. Grades 6-8. Develop skills in poetry, fiction and creative nonfiction, and learn to give and accept constructive criticism. Free-writing, guided writing, artistic collaboration and revision strategies are part of the week. 815-753-5200 or LASEP@niu.edu.

# **HIGH SCHOOL**

## THEATRE ARTS CAMP SENIOR

July 16-21. Residential. Grades 9-12 completed. Enjoy a week packed with rehearsals, workshops, acting classes, theatre games and improvisation. Each camper receives coaching to reach theatrical goals. 815-753-1450 or ksherman2@niu.edu.

## **VISUAL ARTS CAMP**

July 16-21. Residential. Grades 8-12 completed. Serious artists participate in exciting, diverse and creative art experiences. Be innovative as you experiment with new materials, techniques and ideas while producing portfolio-quality work. 815-753-1450 or ksherman2@niu.edu.

# **STEM CAREERS - SESSION 2**

July 23-28. Grades 10-12. Residential at the NIU DeKalb Campus. Campers can investigate different STEM careers by choosing the track that interests them most. 815-753-0533 or STEMOutreach@niu.edu.

#### **CODING**

Be a social hacker! Learn to use computer coding, engage in front- and back-end development and find innovative solutions to real community problems.

Engage in a weeklong engineering challenge as you learn about the different types of careers available to engineers. Meet with NIU engineering faculty and tour our engineering and tech labs, including our clean room.

#### **MANUFACTURING AND TECHNOLOGY**

Learn manufacturing techniques and compete to establish the most efficient assembly line, participate in design and construction challenges, visit the NIU engineering and tech labs, learn to solder and create an electronic device to take home.

#### LIFE SCIENCES

Explore the variety of careers devoted to the science of life. We'll take a tour of the NIU greenhouse, study biology with NIU faculty and grad students and even visit the cadaver lab.

# **AUGUST**

**HIGH SCHOOL** 

## **ADVANCED VIDEO GAME DESIGN**

August 7-11. Day. Age 13 to adults Explore popular video games and learn the essentials of game design. Create a game by developing the story, characters, goals and rules; storyboarding scenarios; designing an interface and recording sound effects, 317-762-8727 or dcl@niu.edu.

# **STEM CAREERS- SESSION 3**

July 30-August 4 .Grades 10-12. Residential at the NIU DeKalb Campus. Campers can investigate different STEM careers by choosing the track that interests them most. 815-753-0533 or STEMOutreach@niu.edu.

#### **ENGINEERING**

Engage in a weeklong engineering challenge as you learn about the different types of careers available to engineers. Meet with NIU engineering faculty and tour our engineering and tech labs, including our clean room.

## **EARTH AND SPACE SCIENCE**

From the ground beneath our feet to the stars above our heads, investigate what the universe is made of and learn how scientists study it. Work with faculty and students from the NIU departments of Geology and Environmental Sciences, carrying out experiments on terra firma and in the NIU observatory.

#### **HEALTH SCIENCES**

Investigate many of the ways in which scientists are helping people live healthier. We will meet with pharmacologists, biomedical engineers, epidemiologists and other types of health professionals as we explore these fields through our own hands-on investigations.

#### **VIDEO GAME DESIGN**

Explore popular video games and learn the essentials of game design. Using Scratch and GameMaker, create our own game by developing a story, characters, goals and rules, write storyboarding scenarios, design an interface and record sound effects.

# **ATHLETICS**

Top collegiate coaches mentor young athletes at premier NIU facilities. Campers are grouped according to age and skill level. Additional camps, dates and more information are available at niuhuskies.com/camps

# **BASEBALL**

June TBD - Ages 5-12

#### **BASKETBALL**

Men's Youth Camp Ages 8-13 - June TBD Women's Coed Youth Camp. Ages 6-13 – June TBD

## **FOOTBALL**

Youth Camp with the YMCA June 10 High School Camps June 11-23

## SOCCER

Coed Youth Day Camp. Ages 6-10. June TBD Women's Youth Overnight Camp July 10-12 6-9 (ages 12 - 15) Women's Elite Prospect Overnight Camp July 10-11 Grades 10+ (ages 16+) Women's ID One Day Camps. June 12 and July 17 Grades 10+ (ages 16+) Men's Elite Prospect Overnight Camp. Grades 9-12+ (ages 14+) - July TBD

# **VOLLEYBALL**

Grades 6-12 (ages 12+). - Overnight camps and one day Clinics - June and July

## WRESTLING

June 25-28. Grades 5-12 (ages 10+)

# **34TH ANNUAL SPORTS MEDICINE STUDENT OVERNIGHT WORKSHOP**

July 9-12. Grades 9-12 (ages 14-18)





# SUMMER Campus at Niu SUMMER Camps 2017

For additional information, camp registration and details on need-based scholarships, visit go.niu.edu/summercamps or call 800-345-9472

# **JUNE**

#### **ELEMENTARY SCHOOL**

# DAY CAMPS

June 26-29, Grades 2-5 9 a.m. to 3 p.m. daily Contact STEMOutreach@niu.edu or 815-753-0533

# **STEM DIVAS**

June 27-30. Day. Grades 2-5.
We're creating a community of confident female scientists and engineers age seven and up who embrace STEM and femininity. Learn soldering wearable electronics, woodworking, 3-D printing, robotics and more.

#### **STEM JUNIOR**

June 27-30. Day. Grades 2-5.
Spend four exciting days exploring STEM concepts and applying what you learned to creative, hands-on projects. Work with Lego robotics, simple electric circuits, 3-D printing and more.



Northern Illinois University

# **MIDDLE SCHOOL**

# GEOGRAPHY CAMP: SURVIVING THE ZOMBIE APOCALYPSE

June 19-23. Day. Grades 6-8. Explore geology careers and learn what it takes to survive a zombie apocalypse while investigating how physical, human and technological aspects of geography impact daily decision-making. 815-753-5200 or LASEP@niu.edu.

#### **EXPLORING STEM - SESSION 1**

June 25-30, Grades 7-9.
Residential at the NIU DeKalb Campus.
Choose a track and investigate STEM concepts and careers. 815-753-0533 or stemoutreach@niu.edu.

#### **CHEMISTRY**

SCI-FI

Chemistry is in everything from ice cream to tie-dye! Our fun, hands-on activities will share the wonders of chemistry, the importance of lab safety and help you form good scientific habits.

#### **LIGHTNING BOLTS AND MAGNETIC FIELDS**

Investigate circuits and electronics as you learn to solder and construct your own devices, explore magnetism with homemade electromagnets and create your own electric motors and generators.

Can radiation give you super powers? Can you really build a light saber? See the science in sci-fi with hands-on activities and experiments, then create a short sci-fi film.

# **LEGO EV3 ROBOTICS: ENGINEERING**Construct and program Lego EV3 robots

that can move, interact with their surroundings and even communicate.

#### **VIDEO GAME DESIGN**

Explore popular video games and learn the essentials of game design. Create a game using Scratch and GameMaker by developing a story, characters, goals and rules. Learn coding in Minecraft and explore 3-D virtual worlds in OpenSim.

# **HIGH SCHOOL**

# **HOSPITALITY LEADERSHIP**

June 14-16. Residential (3 days).
Current high school students. Learn the business of helping people enjoy themselves.
Job shadowing and planning a real dining experience will introduce you to exciting careers in travel, hotel management and restaurant operations. chhsevents@niu.edu.

# **FASHION STUDIO**

June 27-29. Residential (3 days).
Current high school students. Create garments and textile patterns using Adobe Illustrator, plan color palettes using Photoshop, and stage a themed fashion display. scosbey@niu.edu

# **CREATIVE WRITING**

June 18-23. Residential. Grades 9-12.

Develop skills in poetry, fiction and creative non-fiction, and learn to give and accept constructive criticism. Journals, free-writing, guided writing and revision strategies are part of the week. 815-753-5200 or LASEP@niu.edu.

# **SPEECH**

June 25-30. Residential. Grades 9-12.
Develop and enhance your knowledge in a specific area of speech by selecting or writing speeches, honing research skills, memorizing pieces and practicing the art of effective delivery. 815-753-5200 or LASEP@niu.edu.

#### FILM

June 25-30. Residential. Grades 9-12. Work with experienced media producers, camera operators and directors while learning digital film making from script to screen. Complete a group-produced movie for family, friends and festivals. 815-753-5200 or LASEP@niu.edu.

#### STEM CAREERS – SESSION 1

June 18-23, Grades 10-12.

Residential at the NIU DeKalb Campus.
Campers can investigate different STEM careers by choosing the track that interests them most.
815-753-0533 or stemoutreach@niu.edu.

#### **CODING**

Learn the core concepts of programming languages and discover basic and advanced techniques of coding for computers, cell phones, robots and more. Work on your own projects and program mini-computers.

# **ENGINEERING**

Students engage in a week long engineering challenge as they learn about the different types of careers available to engineers. Campers will also meet with NIU engineering faculty as well as tour our engineering and tech labs, including our clean room.

#### **HEALTH SCIENCES**

Investigate what it takes to help people live healthier lives. Meet pharmacologists, biomedical engineers, epidemiologists and other health professionals and conduct hands-on investigations.

#### **PHYSICAL SCIENCES**

Explore careers in the expanding fields of physics and chemistry. Participate in hands-on experiments, meet NIU researchers and get an in-depth tour of Fermi Lab.

#### **VIDEO GAME DESIGN**

Explore popular video games and learn the essentials of game design. Using Scratch and GameMaker, create your video game design by developing a story, characters, goals and rules, write storyboarding scenarios, design an interface and record sound effects.

# JULY ELEMENTARY SCHOOL

# **DAY CAMPS**

July 17-20, Grades 2-5, 9 a.m. to 3 p.m. daily Contact STEMOutreach@niu.edu or 815-753-0533

## **STEM DIVAS**

We're creating a community of confident female scientists and engineers age seven and up who embrace STEM and femininity. Learn soldering wearable electronics, woodworking, 3-D printing, robotics and more.

# **STEM JUNIOR**



#### **MIDDLE SCHOOL**

# **ENGINEERING AMUSEMENT**

July 9-14, Grades 5-7.

Residential at the NIU DeKalb Campus.

Learn the ups and downs of amusement park attractions, design thrill rides, see how engineers optimize traffic flow and even concoct carnival confections. Then spend a day doing experiments at Six Flags! 815-753-0533 or STEMOutreach@niu.edu

## **EXPLORING STEM – SESSION 2**

July 9-14, Grades 7-9. Residential at the NIU Lorado Taft Campus Choose a track and investigate STEM concepts and careers. 815-753-0533 or stemoutreach@niu.edu.

#### ART

Create and innovate while investigating the science and technology of art. Construct wind-powered kinetic sculptures, use polarized light in paintings, create holograms and more.

#### CODING

Be a social hacker! Learn to use computer coding, engage in front- and back-end development and find innovative solutions to real community problems.

#### **LEGO EV3 ROBOTICS: SPACE CHALLENGE**

Face the challenges of space exploration. Design, build and program robots to complete tasks that will lead up to a simulated, manned mission to Mars.

#### **PHOTOGRAPHY**

Explore the science of the selfie! You'll learn about the evolution of photography from the invention of film to modern digital cameras.

#### **SURVIVAL**

In this exciting new track, you'll learn the science of survival. Learn to navigate using the night sky, identify plants, purify drinking water and spend a night in a lean-to you construct yourself.

#### **EXPLORING STEM - SESSION 3**

July 16-21. Grades 7-9.
Residential at the NIU Lorado Taft Campus.
Campers investigate STEM concepts and careers by choosing the track that interests them most.
815-753-0533 or STEMOutreach@niu.edu.

#### ΔRT

Create, design and innovate. Campers will construct kinetic sculptures and automata, use polarization to "paint" with colored light, create holograms and much more!

#### CODING

Be a social hacker! Learn to use computer coding, engage in front- and back-end development and find innovative solutions to real community problems.

#### ENGINEEKIN

From bridge building to cell phone circuitry, engineers solve problems and create the future every day. Develop your problemsolving skills with hands-on projects and fun challenges that will spark your inner engineer!

#### **SURVIVAI**

In this exciting new track, you'll learn the science of survival. Learn to navigate using the night sky, identify plants, purify drinking water and spend a night in a lean-to you construct yourself.

#### WATERBOTICS

Design, build and test robots in underwater challenges. Apply the engineering design process, use information technology tools and practice programming.

# **NIU JAZZ CAMP**

July 9-14. Residential. Grades 8-12 completed. Enthusiastic jazz musicians of all skill levels take a creative approach to improvisation and ensemble playing. You'll perform, learn, listen and improve your understanding of jazz tradition. 815-753-1450 or ksherman2@niu.edu.

# THEATRE ART CAMP JUNIOR

July 9-14. Residential. Grades 6-9 completed. Enjoy a week packed with rehearsals, workshops, acting classes, theatre games and improvisation. Each camper receives coaching to reach theatrical goals. 815-753-1450 or ksherman2@niu.edu.

# JUST FOR GIRLS! VIDEO GAME DESIGN

July 10-14. Day. Grades 5-9. Explore popular video games and learn the essentials of game design. Using Scratch and GameMaker, we'll create our own game by developing a story, characters, goals, and rules, write storyboarding scenarios, design an interface and record sound effects. 317-762-8727 or dcl@niu.edu.

# MINECRAFT AND VIDEO GAME DESIGN CAMP

July 17-21. Day. Grades 5-9
Use Minecraft to explore and build a virtual world while learning ComputerCraft coding and Redstone. Develop skills in complex problem-solving, working in teams and project management. 317-762-8727 or dcl@niu.edu.

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