

## **OPEN TO ALL HIGH SCHOOL STUDENTS**

Students choose 2 sessions | Free Lanyard | NO FEES

# **SCIFI SESSIONS**

#### TREE THINKING

Are red pandas bears? How are species classified? Where are humans located on the tree of life? Learn how scientists categorize the diversity of life using morphology, behavior, and genetics and then become the scientist! You will use characteristics of organisms to build a phylogenetic tree and explore evolutionary relationships.



## MICROBES, MICROSCOPES, AND MYSTERY

Students will get the chance to discover the microbial world living around them, on them and in them! Using the microscope we will get up close and personal with microbial colonies and we will talk about some of the biochemical tests that can be used to identify microbes. Students will get to guess where the different microbes came from and what they might be!

#### **HEARING THINGS**

Have you ever depended on or needed lip reading for communication? Imagine having hearing loss or limited access to clear speech due to a processing disorder. Imagine having a disconnect from people in conversations to fulfill your needs, wants and understanding of an event. This session will demonstrate the effects of reduced speech with speech canceling headphones for a game in a lip reading challenge. This will be demonstrated with a headset that has built in sounds while a teammate reads you a phrase for you to guess and use lip reading for the correct phrase. This interaction will give just a glimpse of the frustrations, fears, apprehensiveness and challenges people face with hearing impairments and processing as well as communicative deficits.



#### LIFE UNDER THE ICE

The continent of Antarctica is a frozen wasteland, but in the ice-covered waters off the coast life thrives. This session will look at the variety of organisms that live in this unique habitat, from familiar penguins and seals to colorful, unique invertebrates. We will also look at some of the ways marine biologists study these animals and the unique challenges polar research presents.

#### FIRST IMPRESSIONS MAKE AN IMPACT!

Students will have the opportunity to mix a common impression material used in dentistry, alginate, and make thumbprint impressions and observe the chemical reactions that occur in the process. This is good for students who may potentially want to enter the field of dental hygiene and/or dentistry.



# **SCIFI SESSIONS** (con't)

#### **SNAKES**

Participants in this session will learn the truth about snakes and their role in nature. Several live snakes will be on display, and participants will have the opportunity to hold snakes and watch them eat. Students interested in biology, our Zoo Science major, and animals should consider this session.



#### **RED LIGHT — GREEN LIGHT**

Students will measure the time between the onset of a color stimulus and the onset of a response. They will also look at the difference in reaction times in responding to green vs. red. After becoming accustomed to responding to only one color, the students will be asked to respond to a specific color (green or red) when sequences that include both colors are presented. The reaction times from these sequences will be compared to determine if latencies change when

students are asked to "think before they act". Students can also engage in competition — who has the fastest reaction time...and to what color???

#### THE SCIENCE OF SERENITY

Prepare for a mind-bending voyage into the psychology of mindfulness. Uncover the extraordinary influence of mindfulness practices on your thoughts, emotions, and overall well-being. Dive deep into the mind's mysteries and the science that paves the way to inner serenity.

#### **COLLEGE FIRST, THEN THE WORLD?**

How do you decide what you want to do? You can explore the internet but if you don't know the 'right' questions to ask, you won't see multiple options for a future in the sciences. In biology, the study of life, the opportunities are quite vast. Come and explore with us. During this session, you will meet current students at West Liberty University, hear their story, and be able to ask questions about how they chose or what you can expect in college - I mean, how different can college be from high school? Come to this session and find out. I promise to let the students be brutally honest with you and I'll add some career tidbits you may not know but will want to explore further!



#### **NURSING: ON CALL FOR CARE**

Have you ever wondered what it would be like to be a nurse? Come explore the profession that combines knowledge, skills and compassion to make life-saving decisions. In this session, students can listen to heart and lung sounds on our famous simulation mannequins. Step into a real hospital room in our updated, state-of-the-art lab!

## DNA: UNLOCKING THE CODE WITH CHEMISTRY

DNA is the code of life and is found inside the cells of living organisms. To study DNA, scientists must isolate the material from cells. Luckily, DNA can be removed using simple chemistry! During this session, students will extract DNA from strawberries by following a short experimental procedure. Students interested in chemistry, biology, or forensics should consider this session.

## **SCHEDULE:** APRIL 11, 2024

Welcome9:00am- 9:30amSession 19:45am- 10:30amSession 210:45am- 11:30amAdmissions11:45am- 12:15pmClosing12:15pm- 12:30pm

Lunch (optional) 12:30pm - 1:30pm

## **REGISTER:**

westliberty.edu/scifi

## FOR MORE INFORMATION

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