

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.



URINE CHEMISTRY

We can learn a lot from the chemical compounds in our urine. In fact, many years ago there were people who made a living "tasting" urine to see if a person had diabetes. Today, Medical Laboratory Scientists test urine using chemical strips to help diagnosis various diseases. In this session, you will work with fellow scientists to help "diagnose" sick patients.

RED DEATH

How easily do microorganisms spread from individual to individual? The answer is highly dependent on the type of microbe. In our session, we will explore one specific microbe - the agent of 'Red Death' - using a simple experiment involving all participants (never fear - the agent we will use is safe for our purposes and 'Red Death' is just for fun). We will also discuss how other microorganisms spread and how different transmission methods cause different disease patterns and the potential for epidemics and pandemics. What better time to discuss and explore these topics?!



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.



SCIFI SESSIONS (con't)

YUCK NOW THAT IS GROSS

Often times the oral cavity can appear gross. Through the use of an intraoral camera we will look at what first appears gross and discover the real functions and names of common oral structures. This is good for students who may potentially want to enter the field of dental hygiene and/or dentistry.



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???

VOCAL ATHLETES: THE SCIENCE BEHIND SPEAKING

We will explore how the human voice is organized, how we can create a wide variety of vocal qualities, and how speech-language pathologists play a role in supporting vocal athletes.

PSYCH EVERYWHERE

Psychology is involved in every career, not just in mental health. This session will have interactive activities and discussions about some of the many different areas that psychology is a part of. We will cover some of the major areas of psychology, such as clinical, school and counseling. Then we will dive into some of the lesser-known fields such as research, forensics, sports, education, cognitive, business and animal psychology.



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 the famous simulation mannequin and don personal protective equipment like that worn by frontline workers during the COVID 19 pandemic.

SCHEDULE: APRIL 7, 2022

Welcome 9:00am - 9:30am
Session 1 9:45am - 10:30am
Session 2 10:45am - 11:30am
Admissions 11:45am - 12:15pm
Closing 12:15pm - 12:30pm
Lunch 12:30pm - 1:30pm

REGISTER: westliberty.edu/scifi

FOR MORE INFORMATION

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