

SCIFI

Science Classes | Find Interesting

April 10, 2025 9am - 12:30pm

College Hall



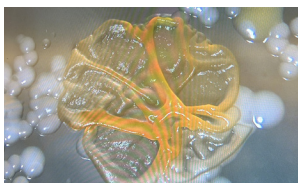
OPEN TO ALL HIGH SCHOOL STUDENTS

Students choose 2 sessions | Free Lanyard | NO FEES | Free Lunch in the Bear's Den

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!

PITCH PERFECT OR LIP SYNC?

Your voice is as unique as your fingerprint- one of a kind, just like you! What are the measurements of your voice? In this session we will explore the acoustic signals of speech and voice production for evaluation and treatment purposes, by recording and analyzing voice samples. We will also experience a simulation of what it is like to have hearing loss or limited access to clear speech due to a processing disorder. Put your lip-reading skills to the test in a game involving speech-canceling headphones and phrase-guessing fun.

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.

THE TRUTH ABOUT 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.

NATURE'S ARSENAL: FIGHTING CANCER, ONE PLANT AT A TIME

In this session, you will be introduced to some of the biomedical research happening at West Liberty University that involves using compounds derived from natural products to treat diseases like cancer. You will be able to visualize cancer cells using a specialized microscope, watch demonstrations of the methods used to extract compounds, and take part in an experiment testing the ability of phytochemicals to kill cancer cells.

SCIFI SESSIONS (con't)



MOON MISSION

What is necessary for humans to live and work on the Moon? As NASA prepares to send humans to the Moon on the Artemis mission, what essential elements for life need to be considered? During this session, you will work with mini robots to tackle three major challenges facing astronauts as they prepare to establish a permanent base on the Moon.

YOU'RE NOT MY TYPE!

It is fortunate that our "life's blood" can be replaced if lost due to bleeding, but a blood transfusion requires that the patient's and the donated blood are compatible. If not, the patient's body will attack and destroy the donor blood- a potentially deadly declaration of "you're not my type!" In this session you will see what's involved in the collection of donated blood, including the processing and testing necessary for its safe use. You will also get to experience the role of the Medical Laboratory Scientist in responding to that line in so many hospital TV shows- "I need 2 units stat!" Using simulated units of blood, you will determine the blood type and perform a crossmatch- the procedure to test the safety of the donated blood for the patient.

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.

PSYCHOLOGY GAME NIGHT

Play some board games and learn about the psychological benefits these games have. Most people like to play board games but they rarely consider the valuable skills we can learn from them. For example, many games teach turn-taking, emotional regulation, and abstract reasoning. Not only do board games allow you and your therapist to have fun but build skills in a variety of areas. Some games are made just for therapeutic reasons but most games can be adapted to build skills. We will cover how to use board games therapeutically.

SCHEDULE: APRIL 10, 2025

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 (FREE)	12:30pm - 1:30pm

REGISTER:

westliberty.edu/scifi

FOR MORE INFORMATION

Leslie Quinn, Ph.D.

Associate Professor of Biology

Chair, Recruitment Committee

304.336.8039 | leslie.quinn@westliberty.edu