

## **SCI FI**

Date: Thursday, March 30, 2023, 9 am to 12:30 pm

New SCI FI Sessions and Descriptions Below:

### **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.

### **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.

### **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???

### **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.

### **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.

### **“I’ve got something to say”**

Have you ever lost your voice for a day or two? Imagine never having a voice at all- never choosing what to eat, saying hello or goodbye, or sharing thoughts about your day. This session will demonstrate the amazing technology available through iPad’s, computer software and switch access for individuals with limited speaking ability. This technology will leave you speechless!

### **BRAIN GAMES**

Does your brain ever play tricks on you? In this Psychology SCI FI session, we are going to explore the brain and how it effects behavior and conscious experience. Activities will include interactive brain games that investigate memory, the senses, and sensory illusions.

### **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!