



Mission STEMCAP: Climate Change
Salt Lake Valley Youth Center February 16th – March 1st 2021

Overview of Mission STEMCAP

Youth-In-Custody have limited access to cutting-edge scientific research and understanding of the pathways opportunities to ameliorate the grand environmental and social challenges that society faces. STEMCAP will present a set of presentations and hands-on workshops to frame a single environmental challenge, provide up to date scientific research on the issue, help students create art/writing interpretations, and create “responses” by making a podcast and writing letters to those concerned. Emphasis is on positive aspects of challenges by pointing out policies, careers, and individuals who are addressing these.

Day 1: Frame The Challenge

February 16th 8:35-9:35 am

STEMCAP staff will introduce SLVYC’s grand challenge of Climate Change and explain the activities they will be doing over the next two weeks. *Session Outcomes:* Students and teachers will be prepared to be active participants in Mission STEMCAP.

Day 2: Documentary Series Discussion – Chasing Ice

February 17th 8:35-9:35 am

YIC will watch a documentary film called *Chasing Ice*, related to the challenge of climate change. STEMCAP staff will lead students through a film discussion following the screening. *Session Outcomes:* Students will have a broad understanding of the concept of climate change and how it affects biological and earth processes throughout the world, and how documentary films can be used to educate and motivate public action.

Day 3: Science Right Now- Steven Kennenberg

February 18th 8:35-9:35 am

Scientist Steven will deliver an in-depth presentation about his cutting-edge research on the effects of drought on Juniper Trees and describe how climate change is influencing the ecosystems in our own backyards.

Session Outcomes: Students will have an understanding of the challenges faced by habitats in Utah as the result of climate change.

Day 4: Art/Science Workshop- Creative Writing – Bonnie Shaw

February 22nd 8:35-9:35 am

Bonnie Shaw will lead students through a writing workshop that helps them engage with the concepts of climate change through the writing of a group poem. *Session outcomes:* Students will express their thoughts about the consequences of climate change and work together to communicate about the issue through poetry and will discuss the role of creative expression in communicating about collective challenges such as climate change.

Day 5: Art/Science Workshop- Utah Museum of Fine Arts

February 23rd 8:35-9:35 am

An art educator from the Utah Museum of Fine Arts will lead students through a hands-on art project relating to the topic of climate change. Students will learn different art techniques and discuss the role of visual art in communicating about collective problems and inspiring change. *Session Outcomes:* Students will understand and be able to demonstrate the role that artistic expression can play in communicating about large scale issues and/or abstract concepts.

Day 6: CorRESPONDence # 1 - UMFA Virtual Museum Tour

February 24th 8:35-9:35 am

STEMCAP staff Laura George will synthesize what we've learned, and what actions are being taken to curb pollution, such as civic engagement with elected officials, participating in scientific research, raising awareness through writing and art, and will discuss with YIC the importance of community venues and community education as tools for inspiring social and environmental change. Annie from the UMFA will lead YIC through a virtual tour of a UMFA exhibit curated around the theme of climate change – how it is represented in art within the museum – and discuss the museum's efforts to build exhibits around social and environmental issues such as pollution. Students think about how this type of educational space might reach a different audience than a public science lecture. Students will then get a chance to work on a hands-on project that asks them to think about how they might curate an art exhibit at the UMFA that highlights the pollution issues that Utah faces. *Session outcomes:* Students will understand the potential impact that museums can have when spreading the word about pollution and other issues that their communities may face and will get a chance to virtually visit the art museum.

Day 7: CorRESPONDence #2 - Letter-Writing Workshop

February 25th 8:35-9:35 am

STEMCAP Staff will teach students about the role of nonprofits in curbing climate change. Students will write a letter to a nonprofit organization about what they have learned and what questions or ideas they have gained that they would like to share with the organization. Bonnie Shaw will guide them through the exercise of writing this correspondence. STEMCAP staff will collect and distribute the letters and responses as appropriate. *Session outcomes:* Students will share what they have learned, why it is important to them, and/or how the letter-recipient can help tackle the challenge and will understand the potential impact of spreading the word about biodiversity loss and other issues that their communities may face.

Day 8: Symposium

March 1st 8:35-9:35 am

Students will have the opportunity to share what they have learned and show off their art and writing. STEMCAP staff will also deliver a short synthesis presentation designed to reiterate all of the work they have done toward addressing the Grand Challenges, and provide pathways to use these concepts to solve problems of all kinds. *Session Outcomes:* Students will be able to share their work with each other and gain a sense of accomplishment.

Schedule at a Glance:

Day 1: Frame the Challenge – February 16th

Day 2: Documentary Series- *Chasing Ice* – February 17th

Day 3: Science Right Now- Steven Kennenberg - February 18th

Day 4: Art/Science Workshop- Creative Writing with Bonnie Shaw – February 22nd

Day 5: Art/Science Workshop- Utah Museum of Fine Arts- February 23rd

Day 6: CorRESPONDence- UMFA Tour – February 24th

Day 7: CorRESPONDence- Letter-Writing Workshop- February 25th

Day 8: Symposium- March 1st