



2020-2021

**Experience-Centered Seminars
Course Information**

**Placement Criteria and
Seminar Descriptions**

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Placement Criteria

Placement in ECSs are assigned according to the following criteria:

- Grade Level
- Preference Ranking of Previous ECS Placements
- Gender and Grade Level Ratios

In the event of a tiebreaker, the following criteria may be taken into consideration:

- Demonstrated Career or Life Interest
- Educational Sensibilities
- Behavioral and Social Indicators

Before submitting the ECS Preference Form (**due Friday, October 16**) please note the following points.

1. Graduation from CSS is contingent upon each student completing and passing an ECS for each year of attendance at the Upper School. An ECS is equivalent to one (1) Carnegie unit of instruction (defined as 120 hours of contact time with an instructor). As such, each ECS is recorded on a student's transcript and counts towards the calculation of Grade Point Average.
2. Attendance is a critical component to the ECS experience. Missing just one half-day of an ECS is roughly equivalent to missing an entire week of a traditional 45-minute class period. Per the CSS Student/Parent Handbook, "excused absences that cause a student to miss significant portions of an ECS will be managed in a variety of ways but often involve supplementary, independent work and the design of alternative, relevant experiences by the students. The family will be expected to cover non-refundable course costs incurred by CSS on behalf of the student even if the student is unable to reap the benefits of the experience due to conditions beyond their control." In most cases, reservations for transportation and housing are difficult and costly to change, and penalty charges may become the responsibility of the family that has requested the change. Consider ECS preference rankings carefully and thoughtfully with regard to potential personal conflicts to *avoid making changes later*.
3. Students are encouraged to rank seminars based on individual interests and/or career ambitions, not according to social influences. It is our hope that students will submit placement rankings based on the alignment between their personal passion(s), intrigue, or value system and the topic that each ECS will explore.
4. At CSS, we use technology very intentionally to meet our educational objectives. School policies limit the use of personal tech devices in divisionally specific ways. In the Upper School, we generally emphasize responsible use. However, students cannot use phones during class other than use authorized by a teacher. ECSs represent a significant reduction or a complete break from personal tech use for our students. We have observed (and

research supports) that there are substantial benefits for personal social skills and group dynamics when students take a break from technology. Individual ECS instructors will review the specifics of their seminar cell phone policy during the parent meeting in November.

5. Costs are close approximations and could change slightly. Also, students tend to value ECS experiences more when they help pay for them. We encourage students to apply themselves during a summer or two to earn part of the cost of their eventual ECS. An ECS scholarship program does exist to support students in pursuing a topic area of passion or interest. [Applications](#) are due **Thursday, October 1** by 10:00 p.m. Late submissions will not be accepted.
6. Students who have demonstrated behavioral problems at school may not be sent on national or international seminars. It may not be possible to reimburse families for costs incurred if a change in seminars must be made due to a disciplinary issue.
7. Independent ECSs are generally discouraged, but are allowed on rare occasions. It is very difficult for most students to organize and execute a suitably academic seminar, and some aspects of the program are usually lost (especially cooperative learning, team-building, and personal growth). A student must collaborate with the Director of Student Programs *prior to the summer (2019)* to review expectations for the independent ECS proposal process. Students should still submit a Preference Form for the existing ECSs (by the September 18th deadline) in case efforts to design an independent ECS do not result in approval by CSS.
8. **This year's ECSs are designed to be flexible in nature, given the current COVID situation. Therefore, travel may or may not happen. Additionally, all instructors are prepared to offer digital versions of their ECS for a shortened duration of time (2 weeks).**

Artful Recovery: The Healing Properties of Art

Instructors: Amy Miller and Marta Kunze

Expected Cost: \$500 - 700

Travel: Day trips to Denver, Pueblo, and sites within Colorado Springs

Essential question: How has Art in many forms helped humanity process and overcome challenges in the past, present, and future?

Course Description: Throughout history, humans have used art therapeutically to heal in many ways. Art is healing because it forces a connection between mind and body and helps children, adolescents, and adults explore their emotions, improve self-esteem, manage addictions, relieve stress, and improve symptoms of anxiety and depression.

In this ECS, we will explore and practice the healing arts that promote wellness, coping, and personal change. Such arts may include music, visual art, dance/movement, poetry/writing, and drama therapies to utilize the creative process. This allows exploration of self-expression and discovery of personal insights and development of coping skills, all valuable tools for maintaining and encouraging mental and emotional health.

Student interests that match this ECS:

- Psychology, art, art therapy, creative endeavors of all sorts

Cell Phone Policy: none needed

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The Science and Art of Rock Climbing

Instructors: JJ Calhoun

Expected Cost: \$400 if local.

Travel:

- Eleven Mile Canyon (day trip)
- Garden of the Gods/Red Rock Open Space (day trip)
- North Cheyenne Canon (day trip)

Essential Questions:

1. How can rock climbing be understood through principles of physics?
2. How does the geological makeup of the stone affect the climber's experience?
3. From the cliff dwellings of the Anasazi, to an Olympic sport, how and why has climbing evolved?

Course Description:

The Science and History of Rock Climbing is a lecture, discussion, problem, and project based course about the physics, geology, and significant histories of rock climbing. Students are first exposed to novel problems in rock climbing through various dynamic and static physics problems. Newton's mechanics are employed often here.

Motivated by the rock itself, students are then asked to view climbing through a geologic lens. Through lectures and field observations, we will address topics ranging from rock identification, geological mapping to plate tectonics, formation of igneous, metamorphic, and sedimentary rocks, and mountain

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building in the Pikes Peak region. By gaining an understanding of rock composition and classification, students learn that rock type has a significant impact on climbing experience.

The final component of the course involves students studying the origins of climbing and the evolution thereof. Included in this component is a study of significant climbing literature, film, and interviews with local climbers will aid in a fuller understanding of the sport itself.

A final, open-ended project will conclude the course.

NOTE: This course does not include climbing instruction and climbing experience is NOT a requisite.

Student interests that match this ECS:

- Physical science, physics, natural history, adventure literature, mathematics, climbing

Cell Phone Policy:

On trips to the out of doors, cell phones are strictly prohibited, unless to capture meaningful photos.

The Great Iron Pour

Teachers: Hans Wolfe and Kaja Reynolds

Cost: \$750

Travel:

- EVRAZ Steel Mill: Pueblo, CO - day trip (8am-3pm)
- Commercial Foundries, artist studios/galleries/sculpture park and Maker Space - Loveland, CO - day trip (8am-6pm)
- Uhrich Locomotive - Strassburg, CO - day trip (8am-5pm)
- Bliss Studio & Gallery: Monument, CO - ½ day trip (9am-12pm)

Essential question: Through hands-on immersion into historic techniques and processes, study of metallurgy, chemistry, materials science and industry, as well as working with professional sculptors, can we come to a clear understanding of the enormous significance of the age of metals while developing a personal aesthetic relationship with cast iron as an artistic medium?

Course description: The Iron Pour ECS is a hands-on immersion into the world of making and pouring molten metal to create art. The course involves a historic study of the discovery and use of metals, the industry of iron and steel making, the chemistry of metals and refractory materials, and sculpting in wax, clay, and other materials. Student art is informed by exposure to galleries, museums, and by visiting artists. Iron casting is physically demanding and teamwork is important as the whole class moves together toward the goal of melting iron and pouring it into molds to make art. This course also includes the pouring of aluminum and bronze, and students learn basic steel forging.

Student interest that match this ECS:

- Art - sculpture, art appreciation, studio processes.
- Science - metallurgy, chemistry, materials science.
- History - civilization, culture, technology.
- Community - collaboration, design thinking, artistic expression.

Cell phone policy: Cell phones may not be used during class time or at field trip sites and must be stored safely away. They will be permitted during travel for entertainment purposes.

Playwriting and Performance

Instructors: John Longo and Katrina Tijerina

Expected Cost: \$350

Travel: If conditions permit, students will attend one or two plays at a local theatre such as TheatreWorks, Funky Little Theatre, or Springs Ensemble Theatre. This would be an evening performance between Thursday and Saturday, or possibly a Sunday matinee.

Essential Question: How does an exploration of the fundamentals of dramatic performance inform and inspire original writing for the stage?

Course Description: This course introduces students to the various aspects of theatrical presentation, such as mise en scene, staging, dramatic conflict, etc. as a stimulant to the writing of brief theatrical pieces of the student's own choosing. Students study successful theatrical scenes from famous plays, learn the basics of theatrical staging, directing and acting, and then use this knowledge to create original pieces, which they will present to the class using their ECS peers as actors and directors. Local actors, directors, theatrical designers and playwrights will visit to help students with their projects; and, if conditions permit, the class will attend at least one local live performance at one of the various theatres in our city.

Student interests that match this ECS:

- Theatre, Acting, Film Studies, Writing

Cell Phone Policy: Cell-phones must be stored away in lockers or turned over to the instructors for the duration of class time each day, unless the instructor deems them useful for a particular exercise or assignment.

The Science and Statistics of Epidemics

ECS Instructors: Natalie Hanson and Josh Gillion

Estimated Cost: \$500

Travel: Local day trips only, subject to conditions arising from the pandemic.

Essential Question: What are the biological factors that contribute to epidemics and the quantitative techniques that scientists, policy makers, public health officials, and economists use to advise public policy in the face of epidemics?

Course Description: In the midst of an epidemic, people often find themselves with more questions than answers. What is this disease? How does it spread? Should I go to work or stay at home? Do I need to wear a mask? When will it end? Rather than answering these questions, this ECS will dive into the methodology behind how these questions are addressed. Scientists, epidemiologists, and economists possess skills and tools to dissect these questions and attempt to provide robust answers. Often, these answers come down to acceptable levels of risk, cost, and probability, based on the best available knowledge in a rapidly changing environment. Students will explore scientific and epidemiological methodologies through laboratory exercises on disease detection and transmission, as well as virtual simulations of disease outbreaks. They will create and apply mathematical models to data sets to project outcomes and calculate statistical probabilities. Through conversations with professionals from public health offices, laboratories, medical facilities, hospitals, and schools, and a trip to the county coroner's office, students will discover the factors that influence policy decisions that are ultimately what we rely on to keep us safe... or as safe as deemed reasonable... during an epidemic.

Student interests that match this ECS:

- Statistics
- Math
- Biology
- Epidemiology

Cell Phone Policy: Cell phones are not needed for this ECS.

Wilderness Survival From Past to Present: Native Women to Mountain Men and Modern Day Adventurers in Colorado and Beyond

Instructors: David Benson and Amanda Krone

Approximate cost: \$2000

Travel (if any): amount of time, location

- Mountain Man Survival School (3 - 5 days)
 - Cripple Creek
- Backcountry Hut Trip and Avalanche Awareness Class (3 days)
 - Duck Lake (Guanella Pass)

Essential questions: What does it take to survive? How have explorers and adventurers, past and present survived various challenges? What pushes us as humans to leave the comfort of our homes and faces the challenges of wilderness survival? How does survival change when the challenge doesn't come by choice? Why do people choose dangerous things?

Description:

This ECS will examine the great history of Wilderness adventure and survival in Colorado, around the US, and all over the world. We will start with a 3 - 5 day hands on training in primitive wilderness survival skills with the experts at Mountain Man Survival School, based in Cripple Creek where we will learn to survive and forage in the historic ways of the original inhabitants and the early American explorers and fur traders. After our five day course, we will return to campus where we will spend a week exploring the history, culture, techniques, and science of survival and exploration.

The culmination of our ECS will come in the final week, as we head off to a 10th Mountain Division hut. Trekking into the wilderness with snowshoes, students will have a chance to practice their survival skills during a 3 day guided backcountry expedition. We will also learn about the WW2 era training that happened in these mountains as well as take a 2 day avalanche awareness class. Finally, throughout the ECS students will learn about and meet some modern day wilderness adventurers. **No prior experience required!**

Student interests that match this ECS:

- History, outdoor education, survival skills, homesteading, wilderness, nature, naturalist writing, French fur trading

Cell Phone Policy: No cell phones will be permitted during the ECS.

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