

2018-2019

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
- 2018-2019 Enrollment Contract Return Date
- 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 Sunday, May 20 by 10:00 p.m.), 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. Course descriptions include a feature, "Student interests that match this ECS", which is intended to orient students to themes and topics that each ECS will explore. 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. CSS values the opportunity for underclassmen to "get their feet wet" on a local or regional seminar. Additionally, upperclass students generally accrue the most points according to the Placement Process Index and, therefore, have the greatest likelihood of being placed in a popular international ECS. Underclassmen are encouraged to rank ECS preferences with an aim for getting placed in a top-choice ECS, but with mindfulness towards the possibility of not accruing enough points to be part of an international ECS.
- 6. 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 Sunday, May 20 by 10:00 p.m. Late submissions will not be accepted.
- 7. 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.
- 8. 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* (2018) to review expectations for the independent ECS proposal process. Students should still submit a Preference Form for the existing ECSs (by the May 20th deadline) in case efforts to design an independent ECS do not result in approval by CSS.

Iceland

Earth and Energy

Essential question: What are the economic, environmental, and societal implications of using and developing various energy sources?

Course description: This course examines conventional and developing energy sources and the role that local or regional geology plays in a society's choice of energy production. Students develop the tools to evaluate a society's energy choices while considering the cascading economic, environmental, and societal ramifications of such choices. Students will compare current energy challenges and opportunities presented by various forms of energy production and consumption such as fossil fuel, solar, wind, geothermal, nuclear, hydroelectric, ocean energy, and biofuels. After a few days near or on campus exploring energy strategies at the local, national, and international level, the class departs for Iceland to spend approximately ten days. Potential activities in Iceland include visits to geothermal and hydroelectric power plants, as well as hikes in lava tubes, on glaciers, and/or to waterfalls. In addition, the group may visit sites of scientifically relevant geologic features such as the readily observable continental drift between the North American and Eurasian plates at Thingvellir National Park, a world heritage site. Following the return home to Colorado Springs, students will spend the last few days of the course summarizing and presenting their findings to peers and members of our community.

Student interests that match this ECS:

- STEM, Renewable Energy, Earth Science, Environmental Science
- Exploration and outdoor adventure
- Economics
- Cultural experience

Instructors: Adele DuBay and Greg Johnson

Expected Cost: \$3,200 - \$3,500

Dates of Travel: Approximately Thursday, March 7, 2019 through Monday, March 18

Cell Phone Policy: Student cell phones will not be permitted during the travel portion to Iceland.

Communication will be handled through the instructors.

Pertinent information related to this ECS:

- A passport is required. The expiration date must extend three months beyond the return date of our visit. Passport renewal is required for a date of expiration prior to June 30, 2019.
- Students must be able to withstand cold temperatures for extended periods of time. The month of March is characterized by gradually increasing temperatures, but the average low is recorded as approximately 28 F and the average high temperature as 38 F.
- Accommodations will most likely be rugged, including the possibility of camping in cold weather or sleeping multiple students to a hostel room.

- Students will be required to have clothing and equipment appropriate for cold and wet weather. Clothing and equipment list to be articulated and distributed at a later date. Proper footwear will be a priority. Examples of adequate footwear to be discussed well before departure. The necessity of bringing an adequate sleeping bag and pad will be determined by September 1, 2018.
- Physical requirements -
 - Student must be able to hike moderate distances (5-7 miles) over rough and varied terrain such as glaciers, glacial moraines, steam vents, mud pots and mud springs, volcanic landscapes including lava tubes, glacial caves, ocean cliffs, and fjords.
 - Student will need to be comfortable in closed, tight, or restricted spaces such as lava tubes and glacial caves.
 - There is the possibility of riding (rental) bicycles. Owning a bicycle is not required, but student must be able to ride a bike independently and demonstrate balance and awareness on a bike suitable for riding on public roadways.
 - There is the possibility of travel on either or both non-motorized and motorized boats student must be confident swimming and/or treading with head above water. Lifejackets will be provided and required to be worn when instructed to do so.
- Vaccine recommendations from the Centers for Disease Control for travel to Iceland: https://wwwnc.cdc.gov/travel/destinations/traveler/none/iceland

Habitat

Essential questions:

- 1. Who are the homeless in our community?
- 2. What are the causes of homelessness, what services are available, and what are some potential solutions to homelessness?

Course description: This local ECS explores the causes and conditions of homelessness in our society, as well as programs and solutions that have emerged to address this problem within our local community. We will compare our city's approach to others in the U.S. and abroad. The complexity of homelessness is naturally interconnected to issues of poverty and hunger, mental health, substance abuse, transitional and affordable housing. The essential question will be explored through visits to and interviews with local service providers such as: the Salvation Army Shelter, Marion House Soup Kitchen, Partners in Housing, Urban Peak, National Alliance for Mental Illness, and many others. Readings, videos and independent research on a topic of each student's choice will provide background information essential to understand all that we observe on these visits. In addition, this ECS will include numerous service activities, from serving lunch at a local soup kitchen to pounding nails for Habitat for Humanity* (or working at the Habitat ReStore) to bring housing to families in need. If you are ready to step outside your comfort zone, learn about our "home" in a whole new way, and perhaps make a small difference in the lives of those who struggle with homelessness, this is the ECS for you.

Mission statement for the Habitat ECS: Through community service and interactions with experts in the field and homeless people on a path to self-sufficiency, the Habitat ECS will move students toward greater empathy for and understanding of the complex causes and solutions to homelessness, as well as impart hope that we can positively impact the human condition.

Student interests that match this ECS:

- Social studies
- Community service
- Economics
- Social justice
- Law
- Psychology/mental health
- The human condition

Instructors: Amanda Abrahams and Anne Taylor

Expected Cost: \$300 - \$400

Dates of Travel: May include one or two overnights, TBD

Cell Phone Policy: Cell phone use will not be a part of student's daily ECS experience.

Pertinent information related to this ECS:

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*Student must be 16 years or older to work with Habitat for Humanity. Students younger than this age will work with the Habitat Re-store instead.

Students who select this ECS should possess the following:

- Open-mindedness and a willingness to confront uncomfortable topics (see course description above) and embrace the mission statement.
- Ability to walk several miles around Colorado Springs
- Willingness to interact with homeless people in a safe setting
- Respect for the dignity of all people we encounter

Madagascar

Island of Diversity

Essential question: Considering the competing demands of development, tradition, and sustainability, what must be done to conserve Madagascar's unique natural & cultural resources?

Course description: Madagascar, the "red island," is a large, stunningly diverse island with pine forests, rainforests, deserts, savanna, mountains, and tropical coastlines. Best known for its lemurs, more than 80 percent of the island's plant and animal species are endemic – they are found nowhere else in the world. Madagascar's people are similarly unique. The country's inhabitants came to the island from places as diverse as Indonesia, Arabia, and mainland Africa over the last 2,000 years, resulting in rich cultural identities that vary across the island and ultimately weave together to form a distinct national identity, unified by a common language. Malagasy people look to their ancestors for guidance and direction, creating interesting cultural tensions as the country modernizes and globalizes. In rice-farming communities, fishing villages, national parks, and large cities, intricate traditions and taboos exist side by side with the issues of modern Africa.

The Madagascar ECS will partner with Where There Be Dragons, an internationally-renowned study abroad program, to explore the intersections between conservation ecology, sustainable development, and cultural diversity. While the majority of Malagasy people make their income from the land, unsustainable land-use practices are threatening their ability to do so into perpetuity. Additionally, such unsustainable practices threaten the conservation of Madagascar's unique wildlife. By connecting with local communities, NGOs, and environmental researchers, our group will explore the intricate challenges of working to protect unique and rare ecosystems, while also supporting the growth and development of local communities.

This ECS will give students an in-depth immersion into Malagasy culture through homestays, language study, music, food, and more. As French is one of the two official languages in Madagascar, French-speaking students will have the opportunity to immerse themselves in French conversation with our guides and other French speakers we encounter. We will spend several days in Ranomafana National Park where we will meet with researchers working on a variety of projects that focus on biodiversity as well as community health and education. Through our travels students will have the chance to see the world-famous lemurs and the Avenue of the Baobabs, and witness firsthand the myriad threats to their preservation. Students will grapple with the challenging intersection of ecology, conservation, culture, and poverty as we look at different strategies to promote environmental conservation while still respecting the needs and culture of the human population.

Student interests that match this ECS:

- Ecology & field research
- Environmental conservation & sustainable development
- Cultural immersion
- African history & politics
- French language

Instructors: David Benson and Natalie Hanson

Expected Cost: \$4,800-\$5,000

Dates of Travel: March 5-21 (tentative, based on airfare)

Cell Phone Policy: To limit the likelihood of loss, damage, and/or theft of personal devices, student cell phones will not be permitted during the travel portion to Madagascar. Communication will be handled through CSS and Where There Be Dragons instructors.

Pertinent information related to this ECS:

- Applicant must be in possession of a valid passport for international travel, complete with usable visa pages. The date of expiration must be beyond 6 months from the course end date. Passport renewal is required for a date of expiration prior to September 30, 2019.
- Student will be required to have clothing and equipment appropriate for warm and wet weather.
 Madagascar is known to experience high solar intensity and heavy rains. Application of sun
 protection will be mandatory each day. Clothing will get wet. In addition, required personal
 equipment may include a bug tent and a camera. Clothing and equipment list to be articulated and
 distributed at a later date.
- This program includes three (3) days of hiking with packs. Student will be expected to walk for 4-6 hours each day on undulating terrain with a pack that weighs approximately 25-40 lbs. Student will be asked to carry what s/he brings.
- Accommodations will include a minimum of three (3) nights in a village homestay with a local family. At least two students will be assigned to an individual home.
- Local travel & accommodations will be rugged (in the truest sense of the word).
 - Bus transport across the country will require upwards of eight (8) hours of travel in a single day due to poor road conditions and busy streets.
 - Overnights will include camping and inconsistent access to electricity.
 - There will be a general absence of indoor plumbing, which will require student to use pit toilets and bathe with cold water.
 - Garbage will be prevalent in public places.
 - Bugs are pervasive in Madagascar. Mosquitos, cockroaches, and the like will be encountered regularly.
 - Waterborne illness and disease (such as traveler's diarrhea) are not uncommon. Student will be expected to limit water intake during travel to bottled water.
 - Especially in urban settings, student may experience children begging and pickpockets.
- Vaccine recommendations from the Centers for Disease Control for travel to Madagascar: https://wwwnc.cdc.gov/travel/destinations/traveler/none/madagascar

Tall Ships 2019

Tales of the (Caribbean) Sea

Essential questions:

- 1. What does the sea mean? In other words, in the millennia of human encounters with the indeterminate and undifferentiated spaces of the sea, what meanings (fears, desires, ideas, politics, history, adventure, profit, exploration/novelty) have been projected onto it, or constructed around it?
- 2. What are the skills needed to sail a ship? (knots, sails, parts of ships, navigation and roles, maintenance, ship design/engineering)

Course description: Set sail on the Roseway, a 137-foot, two-masted, gaff-rigged schooner. The ship sails the U.S. Virgin Islands, departing from St. Croix. While aboard for 10 days, students learn seamanship skills, coastal navigation, small boat handling, marine biology, oceanography, and the plethora of meanings that have been projected onto the sea. Our partner organization, World Ocean School, promotes leadership growth in the areas of ship, shipmate, and self; therefore, students must demonstrate responsibility for the ship, their shipmates, and themselves. Students participate as crew members, assisting in raising and setting the sails, manning the helm, calculating and charting the course, standing watch, and performing hourly boat checks during day and night on a rotational basis. Daily lessons also include readings and discussions related to tales of the sea, physics of sailing, wave mechanics, ship operations, snorkeling, and possibly sea kayaking. A variety of local stops incorporated in our charted course further connects students to marine life, biology, life at sea, and the history of the U.S. Virgin Islands. Through a service project, students build a personal connection to the local area. Prior to setting sail, students delve into the lore of the sea through fictional and historical accounts of maritime feats. Critical to the ECS is teamwork, cooperation, responsibility, and environmental stewardship.

Student interests that match this ECS:

- Outdoor physical activity and hard work
- Being on and in the water (ocean)
- Marine biology
- Physics and applied math
- History of the US Virgin Islands

Instructors: Jennifer Hedden and Marta Kunze

Expected Cost: \$3000-\$3300

Dates of Travel: Approximately March 10-March 21, 2019

Cell Phone Policy: World Ocean School's policy on cell phones will be followed. Cell phones are not allowed on the ship, therefore students will leave them in Colorado Springs. Communication will be handled through CSS and World Ocean School instructors. Cell phone use will also be limited during the local portion of this ECS.

Pertinent information related to this ECS:

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- Proof of identity is required of participant. Identification will be examined by U.S. Customs and Border Protection during travel to USVI. A current passport is the preferred form of identification. Alternative valid documentation includes those found on the <u>St. Croix tourism</u> website.
- Student must be able to pass a swim test to demonstrate swimming proficiency. The test will take place in a local swimming pool during the first week of the ECS. Student must swim, unaided, one full lap (50 yards total) and also tread water for 1 minute.
- Student must be physically able to participate in the operational requirements associated with ship life, to include but not limited to: hauling lines, cleaning the ship, hiking on possible rough terrain, swimming in the open ocean, snorkeling in the ocean, kayaking in the ocean.
- Families should discuss measures to prevent/alleviate sea-sickness with a family physician.
- CSS will provide snorkel and mask for each student, but the eventual gear list will include packing personal snorkel and mask if owned.

[Virtual Reality - Imagine the Future]

Essential question: How can developers use Virtual Reality to solve problems of the modern world?

Course description: Originally introduced in the mid-1980's, the concept of virtual reality (VR) has periodically peaked the interest of developers over the last 35 years. Recent developments in technological advancements have allowed this idea to find its way back into the mainstream. This time the world appears more ready to accept the incredible potential this concept holds. From mobile platforms to full immersion experiences, the application of this technology appear to be limitless. This ECS will not only investigate the potential use and impact of VR across various industries, but also bring student ideas into reality... well, virtual reality.

Students begin the ECS by honing their skills through the construction of a 360° virtual environment. This non-interactive experience will help students understand the concepts of modeling, scale, lighting, animation, simple scripting, camera views in a three DOF (degree of freedom) space, and basic navigation of the Unity Development Software. After construction of their first 3D/VR project, students will conduct user testing as a means for collecting feedback on the experience. "The user is not like me" feedback process will encourage students to build empathy for their intended audience, increasing the potential for a more useful final iteration of their experience.

As students start to consider their final product, research will be done to understand:

- Different platforms (including the HTC Vive that will be used for model creation)
- Similarities and differences between (VR), augmented reality (AR), and mixed reality (MR)
- Professions that support this developing field.

Following this research, students will develop an idea for an interactive virtual reality experience that addresses a concern of the modern world. Through collaboration with industry professionals, students will learn about:

- Model creation methods and programs,
- Movement/Navigation types
- Device deployment
- Performance and frame rates

- Multi-level experiences
- User interface design
- Feedback mechanisms
- Scripting/programming

Each of these skills will be critical as students take their original design and work through user testing trials toward deployment of a final product.

Following the production of a final application, students will combine all of their acquired knowledge and skills to publish a design article that will showcase the process required for the production of their final product. This publication will include brainstorming and sketching artifacts, feedback derived from user tests, video demonstration of asset creation and scripting skills, a description of how the application

should be used. This article will help students showcase the process, but also share their finished product with the world.

Student interests that match this ECS:

- Virtual Reality, Mixed Reality, or Augmented Reality
- Video Games or Video Game Development
- 3D Art or Sculpture
- Computer Programming
- Storytelling or Narrative Creation
- Emerging Technology Industries

Instructors: Andrew Julian and Hans Wolfe

Expected Cost: \$1500.00

Dates of Travel: TBD (see *Pertinent information* section for details)

Pertinent information related to this ECS:

- No prior programming or computer skill experience required.
- Potential for Simulator Sickness / Motion Sickness During User Testing. Symptoms may include: general discomfort, drowsiness, disorientation, fatigue, and vomiting.
- No Personal Device required all materials and products to be provided by CSS.
- Potential travel may consist of 5-6 days away from Colorado Springs based on the availability of relevant industry leaders and their locations.

Writers Gym

Essential question: How can we use the tools of good writing across a spectrum of genres and purposes, from the formal essay to poems, short-stories, poems and other creative forms?

Course description: Do you finally want to try your hand at that novel or play? Would you like to master those skills that will inevitably help you earn consistent A's on your school essays? Whether you are interested in writing fiction, drama, poetry, journalism, or perfecting your essay skills, this seminar will give you the chance to dive into your area of your interest. Students in this seminar will generate their own independent writing project and work on it intensively in consultation with the instructors. Local and regional professional writers will also provide insight and inspiration about their own writing and the life of a writer. Group activities and field trips--with a possible overnight retreat--punctuate the work of filling the page. Whether you are already a prolific writer who would like more sustained time to pursue your passion or someone who just wants to move your writing skills to the next level, the Writers Gym is where you'll get the workout you want.

A Day's activities in the Writers Gym will include some combination of the following:

- 1. Group writing exercises: description, dialogue, creating a character, paragraphing, poetic device games, and sentence skills.
- 2. Grammar and usage: Not too much but enough to work the left brain a bit.
- 3. Workshops and talks with visiting writers, e.g. novelist and award-winning short story writer and poet Annie Dawid.
- 4. Visits to inspirational sites, the Fine Arts Center, the Denver Museum, etc. We will do this once a week to get off campus and shake things up. Students will have a writing assignment geared to each of these visits.
- 5. Writing: the heart of each day. Students work on their projects two to three hours a day.
- Consultation: Aside from frequent "check-ins" during the day, teachers will meet with students
 for intensive one-on-one conferences several times a week to evaluate progress, overcome
 roadblocks, etc.
- 7. Critique groups: Students will have scheduled time to meet in small groups with those working in the same genre or type of project so that they can share material, offer feedback, and inspire one another.

Student interests that match this ECS:

- Creative Writing (poems, stories, novels, scripts, screenplays, creative non-fiction)
- Essay writing
- Improving general writing skills/grammar
- Other forms of written communication (journalism, blogging, etc.)

Instructors: Amy Johnson-Smith and John Longo

Expected Cost: \$400

Dates of Travel: One possible overnight retreat during the second or third week of the ECS

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Cell Phone Policy: In order to maximize time for invention, creativity, and collaboration, use of cell phones during this ECS will be restricted.

Pertinent information related to this ECS: There are no special requirements for this ECS beyond an interest in writing and a supply of pens, pencils, and a writing journal.