

Interim Course Catalog for 2020-2021

The Interim Course Student Request Form is located at the end of this catalog.

You must talk with your parents before submitting your requests.

We have an exciting list of offerings for students during the 2020-2021 interim, which is from **Monday, January 4th to Wednesday, January 20th**. Please read the course descriptions below noting the cost and minimum and maximum number of students needed or allowed.

After discussing your options with your parents, please complete the Interim Course Student Request Form at the end of the catalog indicating your top three requests and email to Ms. Jane Etta Bryan (bryan@gssm.k12.sc.us) between Wednesday May 6th at 5PM and Wednesday, May 13th at 5PM.

Notes:

- Because of health concerns, no interim courses will involve overnight travel during 2021.
- Some courses might not occur if the minimum number of students is not met. If the maximum number of students is exceeded, placement will be based on requests in the order they are received.
- If you are requesting the same class for the second year in a row, you must receive permission from Mr. Dorsel.
- Courses vary in content and cost. If a student registers for a course that has a fee, the student is responsible for payment in full for the course, even if he/she later withdraws or is dismissed from GSSM prior to or during interim. If this occurs, GSSM will not reimburse payments made, and the student remains responsible for the full payment of the course fee.

Courses

1. The Beauty of Mathematics
2. Art in the Interim
3. Origami: The Art of Paperfolding
4. Patchwork Quilting: Stitching Together Textile Art and Geometry
5. MakerSpace
6. Mathematical Problem Solving
7. Mental Health through Pop Culture: Psychology of Adrian Monk
8. Understanding and Practicing Mindfulness
9. Strength and Conditioning/ Sports Medicine Injury Prevention, Injury Care, Injury Recovery
10. Gliding at the Bermuda High Soaring School
11. Sports in the Interim
12. Never Been Done
13. Equine Science and Horsemanship
14. Ethics, Beauty, and the Environment
15. Music Performance in the Interim
16. The Cooking Lab
17. Tea and Coffee in the Interim
18. Polymers
19. The Ethics of Fashion
20. Genomics Workshop: Computational Biology
21. Introduction to American Sign Language and Deaf Culture
22. Microbial and Medical Diagnostics
23. Chess in the Interim

24. Skiing and the Underlying Science Principles
25. Being Francophone in America
26. Borges and I: The Many Worlds of Jorge Luis Borges
27. How to Do Nothing: Nature, Technology, and Cognition in the Age of Distraction

Course Descriptions

The Beauty of Mathematics

Description: This course will explore fascinating mathematical topics that are not covered in typical mathematics courses. Topics of this course will be determined by student interest, but some possible topics include flexagons, rational tangles, graph theory, and Pascal's triangle. We will play several games including Ticket to Ride, SET, Spot It!, and Blokus and discuss mathematical concepts that arise from these games. Furthermore, we will watch and discuss several mathematical movies and read the book *Flatland*. There are no mathematical prerequisites for this class.

Instructor: Dr. Nicole Kroeger

Max Students: 10

Min Students: 4

Cost for the student: None

Art in the Interim

Description: In this dynamic visual arts course, students will learn and work in an inspiring, studio-based art environment rich with student-choice opportunities. Working alongside professional artists, students will explore traditional and contemporary art techniques and processes using a variety of materials to create meaningful, 2D and 3D works of art. In addition to the creative hands-on experience, art students will engage in critiques, write artist statements, and take excursions to study important works of art in museums, artist studios, and galleries. At the culmination of the course, students will have a public exhibition of their original works of art in a museum, gallery or other public venue.

Instructors: Patz Fowle, Mike Fowle

Max Students: 12

Min Students: 2

Cost: \$25 to cover museum entry fees and the cost of lunch during the field trip

Origami: The Art of Paperfolding

Description: Come learn how to create insects, birds, flowers and anything else your heart desires! Origami is a relaxing interim in which you will learn about the rich applications in mechanical engineering and mathematics, and what this art has told us over the centuries about culture and history. Paper folding might be an ancient art but it can also transform the modern life. By meditating on folding paper, we boost mindfulness. We learn to concentrate in the moment without distraction. In the age of social media, this quiet attentiveness alleviates stress from the constant ebb and flow of information. Origami requires no resources other than a sheet of paper and free time. It requires no learned skill like other arts and crafts but the ability to make a crease. And in turn with patience anything can be realized from a simple flapping bird to a complex antlered deer to the mathematical precision of polyhedra.

Instructor: Dr. David Whitbeck

Max Students: 20

Min Students: 2

Cost for the student: None

Patchwork Quilting: Stitching Together Textile Art and Geometry

Description: Learn the basics of patchwork piecing and quilting and explore the history of this beautiful and practical textile art form. Students will use geometry to design and craft various quilt blocks and projects. In addition to personal projects, the class will work together to create quilts to be donated to those in the community in need of comfort. No sewing experience required; needed machine and hand sewing skills will be taught in this course.

Instructor: Dr. Kristin Walker

Max Students: 8

Min Students: 4

Cost for the student: \$30 for unexpected materials (i.e. more fabric, thread) that will be used toward the main project the students will be able to keep

MakerSpace

Description: The GSSM Makerspace gives students the opportunity to pursue their technological interests in 3d design and physical computing in a relaxed environment. No previous experience is required, and students can learn the basics, or they can come into the class with the intention of developing advanced ideas. Students will create their designs using the Arduino microprocessor and associated sensors, motors, etc., as well as 3d printed models using graphic design tools like SolidWorks, OnShape, or TinkerCad. Students who are on the robotics team can work on the robot design and functionality. We will probably take trips to Integrated Systems, Inc, and Sonoco.

Instructors: Dr. Elaine Parshall, Dr. Elizabeth Bunn

Max Students: 12

Min Students: 4

Cost for the student: None

Mathematical Problem Solving

Description: This interim course is aimed at students who enjoy solving mathematical problems and like to improve their creative mathematical skills and mathematical problem solving skills. We will pick up problems mainly from the American Mathematics Competition for tenth and twelfth graders (AMC10 and AMC12). There is an archive of old exams at <https://artofproblemsolving.com/>.

Instructor: Dr. Sris

Max Students: 12

Min Students: 2

Cost: None

Mental Health in Pop Culture: The Psychology of Adrian Monk

Description: This course will use the television series *Monk* as a foundation for exploring and understanding specific psychological disorders and their corresponding treatment protocols. It will also address societal practices in the treatment of mental illnesses in general, and consider differences in public versus private delivery systems. We will travel to Columbia, SC to observe a meeting of the South Carolina Mental Health Commission and visit a currently operational psychiatric hospital

Instructor: Dr. Alison Evans, Sheri Warden-Harmon

Max Students: 12

Min Students: 5

Cost for the student: None

Understanding and Practicing Mindfulness

Description: Mindfulness is being fully aware of the present moment. It's both an ancient practice and an increasingly popular way to cope with the stresses of modern life. In this class, we'll read about and discuss the history of mindfulness and research into its benefits. We'll also practice mindfulness using an app like Calm, Headspace, or Insight Timer, and reflect on what that practice means to us. We'll also read some poetry based in contemplation by authors like Wendell Berry, Mary Oliver, Maulana Rumi, and Rainer Rilke, and try writing some contemplative poetry ourselves. Finally, we'll visit some local places that teach mindfulness, like the Black Creek Arts Council, and end the class with a day-long silent retreat at a place like Springbank Retreat Center in Kingstree.

Instructor: Dr. Matt Martin

Max Students: 12

Min Students: 5

Cost for the student: None

Strength and Conditioning/ Sports Medicine Injury Prevention, Injury Care, Injury Recovery

Description: Designed to help students understand and develop plans for weight training, functional strength training and conditioning training. Sports medicine portion of the class will focus on injury recognition, injury stabilization and recovery. This class will be hands on in the weight room, gymnasium, training room and YMCA.

Instructors: Hugh O'Connor, Jennifer Nesselth, Jacob Robertson

Max Students: 16

Min Students: 6

Cost for the student: None

Gliding at the Bermuda High Soaring School

Description: Learn how to fly an engineless, glider sailplane through an introductory course at the Bermuda High Soaring School. Each student will fly approximately 30 dual flights (at 3000 ft. and 1500 ft.) with a highly experienced, fully qualified FAA flight instructor. During each flight, students will learn how to control the glider as they work toward flying at least one supervised solo flight. Students will learn the basic physics of aviation, as well as flight plans and safety procedures. Every day the class will drive to the soaring school (~45-minute drive) for ground school and 3-5 flights, weather permitting. Learn more about gliding and the Bermuda High Soaring School at www.glider.org.

Instructor: Dr. Reggie Bain

Max Students: 6

Min Students: 3

Cost: Roughly \$2500 for cost of course and lunches (provided by Bermuda High Soaring)

Sports in the Interim

Description: Students will learn about and participate in a variety of sports while also traveling to some sporting events. In addition, tours will be scheduled in order to visit some athletic facilities and museums. A book based on some aspect or history of a sport will be read and discussed.

Instructors: Dr. Lance Riddle and Dr. Jennifer Brown

Max Students: 12

Min Students: 4

Cost: \$400 (covers activity/event fees and meals off-campus)

Never Been Done

Description: Students will execute a research project in microwave spectroscopy that has never been done before. The course will provide a hands-on, active-learning experience using GSSM's state-of-the-art microwave spectrometer, an instrument used to discover the shapes of molecules. Activities will include using modern instrumentation, analyzing data sets, and formulating conclusions from the data. The class will also take one or more day-long field trips to other research laboratories at nearby universities.

Instructor: Dr. Gordon Brown

Max Students: 8

Min Students: 2

Cost for the student: None

Equine Science and Horsemanship

Description: A fun, hands-on course that combines riding lessons with horse care and in-depth exploration of horse physiology and husbandry from local experts. Each student will ride and be responsible for their "own" horse throughout the course. Students will leave for Tally Ho Equestrian Center in the morning and return each afternoon.

Instructors: Dr. Jen Borgo Raia, Dr. Carl Yackey

Max Students: 12

Min Students: 8

Cost: \$350 per student, payable to the barn for lessons, supplies, instruction, and stipends for guest speakers

Ethics, Beauty and the Environment

Description: This exciting course allows students to travel to the natural treasures of South Carolina to better understand the history of America's conservation efforts and the environmental challenges of the future. Our course

combines classroom discussions, readings in the classic works of environmental literature, studies of the great nature photographers and artists, and lessons from guest ecologists and activists. Our location visits include Congaree National Park, Hilton Pond Center for Piedmont Natural History, Francis Beidler Forest, Botany Bay, and the Native American Studies Center. We will also closely study the current debates and conflicts in conservation, natural resource management, public lands legislation, green energy, and environmental preservation. Students will keep reflective journals on course material and give classroom presentations on current problems, debates, and solutions.

Instructor: Dr. Karl Rohr

Max Students: 14

Min Students: 3

Cost for the student: No fee. Students will pay for meals during day trips.

Music Performance in the Interim

Description: Students will have the opportunity to learn, listen and analyze, create, and perform music of various genres as soloists and within ensembles. This is a performance-based course, so lots of practice and performance-practice is required. We will explore interesting topics of ethnomusicology, theory, and music history. Towards the end of the term, we will travel to Charlotte, NC to see a musical, orchestra, or opera performance at the Blumenthal Performing Arts Center. For our final presentation, we will be in the spotlight of the school community to showcase our mastered works in the gymnasium!

Instructors: Miranda Averill, Dr. Stephen Kaczowski

Max Students: 15

Min Students: 5

Cost: No fee. Students will pay the cost of meals during travel.

The Cooking Lab

Description: Students will learn basic cooking skills as well as study some of the science and math behind cooking. There will be at least one local morning field trip.

Instructors: Jenny Salazar, Dr. Paula Bailey

Max Students: 12

Min Students: 4

Cost for the student: \$20 for supplies

Tea & Coffee in the Interim

Description: Learn how the two most commonly consumed caffeinated beverages on the planet are grown, processed, and consumed in different cultures.

Instructors: Dr. Christopher Roberts and Dr. Joe Wensink

Max Students: 10

Min Students: 5

Cost for the student: None

Polymers

Description: Polymers are important part of our everyday life. Polymers are frequently called plastics. The use of polymeric materials is increasing rapidly year by year and in many applications. They are replacing conventional materials such as metal, wood and natural fibers such as cotton and wool. We will investigate the different types of polymers, synthesis, characterization and recycling. Prerequisites: CHE 300, CHE 202 (with permission), or CHE 100.

Instructor: Dr. Phelesia Jones-Cooper

Max Students: 6

Min Students: 3

Cost: None

The Ethics of Fashion

Description: In this introduction to “slow fashion,” students will consider the ethics of fashion in consumer culture, which encourages us to think of clothing as disposable—a position that is neither respectful of craftsmanship nor kind to our planet and its workers. We will dip into fashion’s artful past, traveling to locations such as the Mint Museum of Craft

and Design and look at its creative future, visiting contemporary fiber art installations in nearby Lake City. Guest speakers will share experiences with ongoing sustainable fashion and visual art projects. Ultimately, students will create their own garments from recycled and upcycled materials. Students do not need sewing skills to complete this design challenge. Basic sewing supplies will be provided, but students should be prepared to purchase additional materials as needed depending on their individual projects. (Students typically spend less than \$25 on materials.)

Instructors: Dr. Deidre Hall, Dr. Jessica Pitchford

Max Students: 13

Min Students: 2

Cost: No fee. Students should be prepared to spend approximately \$25 for materials, although many students will spend less, and the occasional snack on road trips.

Genomics Workshop: Computational Biology

Description: In this course students will learn --to interact with computational environments, including the Praxis Cloud, a data-intensive *compute* environment which hosts exabyte datasets ^(really big) --basic programming literacy using Python for data engineering and analytics, --to extend the command line with genomic examples, --to solve real genomic problems, --to use real bioinformatics workflows to mine modern genomic datasets. No prerequisite courses are required.

Instructors: Dr. Al DeGennaro, Dr. Alex Feltus

Max Students: 15

Min Students: 5

Cost: None

Introduction to American Sign Language and Deaf Culture

Description: This will be an introduction to American Sign Language and Deaf History. Students will learn basic signing skills and protocols. They will learn about Deaf Culture and the norms for interacting with Deaf community. Day trips to the South Carolina School for the Deaf and Blind and to Murrells Inlet Deaf Fisherman's Memorial.

Instructor: Rita Nuckles

Max Students: 11

Min Students: 2

Cost: No fee. Students will pay incidental cost for meals and snacks for field trips.

Microbial and Medical Diagnostics

Description: This lab course is a survey of the various diagnostic tests done to identify diseases caused by bacteria, viruses, chemicals (pollutants and food poisoning), or genetics. This course will include the theory behind the tests as well as performing the tests using diagnostic kits. The students will learn the foundations of clinical diagnostic methods in basic chemistry, biology, and physics. Students will also gain a basic understanding of the use of clinical data, the interpretation of diagnostic information, the limits of using clinical data for diagnosis, and using clinical data to solve problem with case studies. The course might include a trip to a diagnostic lab (Florence or Columbia). The techniques learned in this class will include some of the techniques listed: bacteriology, clinical chemistry, hematology, blood banking, immunology, phlebotomy, renal analysis, molecular biology techniques, toxicology, endocrinology, human cell therapy, mycology, biochemical genetics, personalized genomics, clinical immunoassay, mass spectrometry, infectious diseases serology, as well as ENT and eye testing. Due to time constraints, we will not be able to do all the techniques.

Instructor: Dr. Bhuvana Parameswaran

Max Students: 12

Min Students: 10

Cost for the student: None

Chess in the Interim

Description: Whatever level a chess player might be, he or she still has much to learn. Each day during the interim will include a classroom period and a period of supervised play, both with a goal of raising the skill level of each player.

Instructor: Dr. Clyde Smith

Max students: 16

Min students: 4

Cost to the student: None

Skiing and the Underlying Science Principles

Description: According to Wikipedia, Ivan Origone is the fastest person ever on a pair of skis. On March 26, 2016 in the French Alps, Origone hit 70.820 m/s (158.42 mph). Matthew Jamison Pierre set a world-record cliff jump of 77.7 m (255 feet) at the Grand Targhee Resort in Wyoming. He skied away with a bleeding lip from being hit by a shovel when his partners dug him out of his 12-foot hole. It has been estimated that Pierre was almost at terminal velocity when he hit the ground. Can you match their feats in South Carolina? Well, no... But you can ski, board, and explore the science of skiing during the Skiing interim. The interim will include 5 full days of skiing/snowboarding at various resorts which includes transportation, tickets, lesson (if needed) and equipment. Between snow days, you will explore the physics that underlie day-to-day ski activities, as well as the superhuman feats of daredevils and athletes like Origone and Pierre. This interim is open to students of all physics/ski abilities. Care to risk it?

Instructors: Dr. Mark Godwin, Dr. Glenn Morrow

Max Students: 13

Min Students: 8

Cost: \$650. This includes 5 full days of skiing/snowboarding at various resorts which includes transportation, tickets, lesson (if needed), and equipment. Other activities will be included. Note that due to the Corona pandemic, prices may alter slightly, as well as group vs. individual rates, which depend on the number of participants.

Being Francophone in America

Description: This course will explore some of the staples of the life of Francophone people, allowing students to experience three of the most important cultural products of French-speaking countries: cuisine, cinema, and literature. Rather than traveling to la Francophonie during this semester in order to engage in educational tourism, we will explore what it is like to live life as a Francophone in the US. To do this, we will cook, eat, and discuss economical, delicious, and nutritious food from the Francophone world; we will watch and discuss great films from the Francophone world; and we will read and discuss short fiction from the Francophone world. Preparing and sharing dishes from Francophone Europe like bouillabaisse, ratatouille, Liège potato salad, Swiss fondue, and quiche, but also foods from Africa like tajine and attiéké and North American specialties like gumbo and poutine, we will strive to become more conscious of the way we eat. Viewing both famous films from esteemed directors and more ordinary popular films and television programs, we will also gain an understanding and appreciation of French-language cinema. Reading the tales and short stories of authors like Taos Amrouche, Birago Diop, Léon Damas, Marie de France, Charles Perrault, Marguerite de Navarre, and Guy de Maupassant, we will gain a basic understanding of the history and culture of Francophone civilizations from the Middle Ages to the present. Additional activities would ideally include interviewing local Francophone people and going for group bike rides around Hartsville (weather permitting). Students with any level of prior French knowledge will learn how to access and value new sources of nourishment, conversation, culture, entertainment, and community.

Instructor: Dr. Antonio de Ridder-Vignone

Max Students: 12

Min Students: 2

Cost: None

Borges and I: The Many Worlds of Jorge Luis Borges

Description: This course will examine the intersection of Borges's works with science, philosophy, and mathematics. We'll explore literary expression, language, mathematical imagination, and complex worlds, based on Borges's stories and short novels. The course will be based on his works and their connection to mathematical and philosophical insights and theories. There could be some local travel involved, still to be decided (mainly libraries, since it is one of the central topics to be discussed).

Instructor: Dr. Taylor Belcher, Dr. Chris Champi, and Dr. Roberto Robles-Valencia

Max Students: 20

Min Students: 2-4

Cost for the student: None

How to do Nothing: Nature, Technology, and Cognition in the Age of Distraction

Description: “Nothing is harder to do than nothing.” So writes cultural critic and essayist Jenny Odell, whose 2019 book *How to Do Nothing* proposes a relationship between decreasing attention spans, political turmoil, and environmental degradation. In this interdisciplinary interim course, we will examine how the technological and societal forces vying for our attention both facilitate and disrupt our connection to ourselves, to the natural world, and to one another. Readings from the fields of cultural studies, psychology, philosophy, environmental science, and literature will encourage students to examine the role of technology and distraction in their own lives and to rediscover the power of paying attention. In this course, we will examine the ways in which we give up our attention and the ways in which we can cultivate it, including the exploration of nature, stillness, and flow. Students can expect day hikes, reading and reflection, phone-free experiments, and newfound appreciation for the flora and fauna who live among us.

Instructors: Dr. Cara Roberts, Dr. Kristen Angierski

Max Students: 15

Min Students: 5

Cost for the student: None

2021 Interim Course Student Request Form for Rising Seniors

***** Please complete and email to Ms. Jane Etta Bryan (bryan@gssm.k12.sc.us) no earlier than Wednesday May 6 at 5PM and no later than Wednesday, May 13 at 5PM. *****

Please request your top **three (3) choices** for courses that you are interested in taking during interim next year. Courses are filled as requests are received. When making your requests, note the cost associated with each course and know that some courses might not occur if the minimum number of students needed is not met. Also, keep in mind that if the maximum number of students is exceeded, placement will be based on requests in the order they are received. If you are requesting the same class for the second year in a row, you must receive permission from Mr. Dorsel.

Timeline for course request, placement and payment is as follows:

- **Wednesday, May 13th**: Last day to return course request form to Ms. Bryan. Students will be notified of their course placement after all request are submitted.
- **Thursday, Sept. 10th**: Deposit of half of the course fee is due. **Fees may be paid online at <https://ssl.sc.gov/checkout/scgssmonlinepmts/> or by check payable to GSSM with Interim on the memo line given to Ms. Kelly Butler.**
- **Thursday, Nov. 5th**: Full payment of course fee is due.

Student Name: _____

First Choice: _____

Second Choice: _____

Third Choice: _____

Student Signature indicating that you have talked with your parents/guardians and they approve of your choices:

_____ **Date:** _____

To be completed within the Academic Office:

Completed course request form received on: _____

Course placement: _____

1st payment amount and date received: _____

Full payment amount and date received: _____