



# Upper Level

## SOUTH CAROLINA

### Calendar of Program Offerings

#### 2017-2018

Discovery and Planetarium Programs are **NOT** offered every month. Please see the calendar below along with program descriptions for **MONTHLY** offerings. When planning your visit, please select programs offered in the **same month**.

2017-2018 South Carolina Upper Level Student Programs Calendar

	SIXTH GRADE	SEVENTH GRADE	EIGHTH GRADE	HIGH SCHOOL
SEPTEMBER	Energy Transformations Polygon Puzzle Simple Machines		*Engineering the ISS Force & Motion Minerals, Ores & Fossil Fuels	**Ecohike in Hitchcock Woods (2 hour guided hike)
OCTOBER	Energy Transformations Polygon Puzzle Simple Machines	Center of the Atom Changes Matter Meet the Elements Radioecology	*Engineering the ISS Force & Motion Radioecology Rockin' & Rollin'	*Engineering the ISS Center of the Atom Probing Periodic Table Radioecology
NOVEMBER	**Ecohike in Hitchcock Woods (2 hour guided hike)	Changes Matter Meet the Elements Ravenous Raptors	*Dark Shadows Kinesthetic Astronomy Lunar Design Challenge	*Dark Shadows Kinesthetic Astronomy Lunar Design Challenge
DECEMBER			*Dark Shadows Kinesthetic Astronomy Lunar Design Challenge	*Dark Shadows Kinesthetic Astronomy Lunar Design Challenge
JANUARY			*Planetarium Program Minerals, Ores & Fossil Fuels Seafloor Surveyors	
FEBRUARY	*Planetarium Program Animal Adaptations Hiker	*Planetarium Program Are You Dense? Ravenous Raptors	*Planetarium Program Rockin' & Rollin' Seafloor Surveyors	
MARCH	*Planetarium Program Animal Adaptations Hiker	*Planetarium Program Are You Dense? Ravenous Raptors		**Ecohike in Hitchcock Woods (2 hour guided hike)
APRIL	**Ecohike in Hitchcock Woods (2 hour guided hike)	**Ecohike in Hitchcock Woods (2 hour guided hike)		**Ecohike in Hitchcock Woods (2 hour guided hike)
MAY	**Ecohike in Hitchcock Woods (2 hour guided hike)	**Ecohike in Hitchcock Woods (2 hour guided hike)		**Ecohike in Hitchcock Woods (2 hour guided hike)

\* Indicates a Planetarium Program (you may only select ONE planetarium show per visit)

\*\* Indicates an Ecohike (these hikes are a stand alone program offered off-site at Hitchcock Woods)



# Seventh Grade South Carolina Programs

## MONTHLY PROGRAM PAIRINGS

OCTOBER	NOVEMBER	FEBRUARY & MARCH	APRIL & MAY
Center of the Atom Changes Matter Meet the Elements Radioecology	Changes Matter Meet the Elements Ravenous Raptors	*Planetarium Program Are You Dense? Ravenous Raptors	Ecohike in Hitchcock Woods

## PLANETARIUM PROGRAMS

### NEW PLANETARIUM PROGRAMS Months offered: FEBRUARY & MARCH

The RPSEC will be selecting grade level appropriate planetarium programs to offer during these months. All programs will be standards-based; full dome shows viewed with our newly upgraded planetarium equipment!

## DISCOVERY PROGRAMS

### ARE YOU DENSE? Months offered: FEBRUARY & MARCH

Students explore density using Earth materials including minerals, water, sand, and iron filings. They will take measurements, collect data, plot coordinates, and interpret graphs as they analyze the mathematical relationship between mass and volume. Standards: 7.P.2B.1, 7.P.2B.2

### CENTER OF THE ATOM Month offered: OCTOBER

Students explore atomic structure using a series of hands-on activities which concludes with the discovery of the uses of an atom they create using the Interactive Nucleus display and the Living Periodic Table. Standards: 7.P.2A.1, 7.P.2A.2

### CHANGES MATTER Months offered: OCTOBER & NOVEMBER

Students explore physical and chemical properties of matter. They compare physical and chemical changes and experience reactivity through experiments and an "igniting" demonstration! Standards: 7.P.2B.1, 7.P.2B.4

### MEET THE ELEMENTS Months offered: OCTOBER & NOVEMBER

Students "meet the elements" in a fun music video; then work together to classify materials as elements, compounds and mixtures. They will build atomic models and discover why compounds are either ionic or covalent. Standards: 7.P.2A.3, 7.P.2A.4

### RADIOECOLOGY Month offered: OCTOBER

Learn what happens when radionuclides and ecosystems meet with the Savannah River Ecology Laboratory scientists. The SREL has the only radioecology undergraduate education program in the world. Challenge the myths and learn the facts about radioecology from research conducted at the SRS in Aiken, South Carolina, the Chernobyl Exclusion Zone in Russia, and the Fukushima Daiichi accident in Japan. Standards: 7.EC.5A, 7.EC.5B

### RAVENOUS RAPTORS Months offered: NOVEMBER, FEBRUARY, & MARCH

What is a raptor? How is an osprey's talon different from an owl's? Students will take an up-close look at birds of prey and examine their role in the food chain. Using field guides and wing/talon specimens we will compare and contrast physical characteristics, adaptations and habitats of these predators. Standards: 7.E.5A.1, 7.E.5B.1, 7.E.5B.2



# Seventh Grade

## SC Programs Continued ...

### OUTDOOR EXTENDED HOUR PROGRAM

#### ECOHIKE IN HITCHCOCK WOODS **Months offered: APRIL & MAY**

This is a two-hour, two-mile guided hike through Hitchcock Woods. Native plants will be identified, evidence of animal life will be examined, and forest communities will be compared. Standards: 7.E.5A.1, 7.E.5B.1, 7.E.5B.2



# Ruth Patrick Science Education Center

UNIVERSITY OF SOUTH CAROLINA AIKEN

## 2017-2018 RPSEC PROGRAMS RESERVATION INFORMATION

### PROGRAM REQUEST GUIDELINES

We recommend that ONE teacher make a reservation request for the entire grade level. We can accommodate up to 90 students per day (typically 9:15am- 1:15pm) unless special arrangements are made in advance for larger groups. Go to: <http://rpsec.usca.edu/student/ExpandedDoubleTriple.pdf>

#### - Groups of 10 to 30 students -

Plan to select **one, two, or three programs** per visit. Programs are 1 hour long.

#### - Groups of 31 to 60 students -

Must select **two or three programs** per visit.

Only **ONE** program may be a planetarium program.

Your visit will be approximately 3 hours/2 programs or 4 hours/3 programs (includes 30 minute lunch break).

#### - Groups of 61 to 90 students -

Must select **three programs** with only **ONE** planetarium program.

Your visit will be approximately 4 hours (includes a 30 minute lunch break).

### RPSEC PROGRAM FEES

Type of Program	Aiken County Students	All Other Students
DISCOVERY	Prepaid by district	\$3.50 per student/per program
PLANETARIUM	\$3.50 per student/per program	\$3.50 per student/per program

*One adult per eight students admitted free for planetarium programs. Additional adults pay \$3.50 each.*

#### 2016-2017 Reservation Request Timeline:

Friday, June 9 <sup>th</sup> .....	Deadline to submit Student Programs Requests for 2017-2018 Confirmation contract letters will be mailed to teachers' home addresses no later than July 28 <sup>th</sup>
Friday, August 25 <sup>th</sup> .....	Deadline to return signed Confirmation Contract Letters to the RPSEC
Tuesday, August 29 <sup>th</sup> .....	All unconfirmed 2017-2018 student programs <u>will be cancelled</u> and filled from the wait list
Wednesday, September 6 <sup>th</sup> ...	RPSEC Student Programs classes begin

### PROGRAM GUIDELINES

Children **UNDER 4 years of age** are **not permitted** in any of our student programs.

Please see the age guidelines on our program descriptions sheet.

Please help our stars shine brightly in the planetarium by leaving any light-up shoes or clothing at home.

### ADA STATEMENT

Please indicate if you need any special services, assistance, or accommodations to participate in our programs by contacting us in advance at [rpsec@usca.edu](mailto:rpsec@usca.edu) or (803) 641-3313.

# 2017-2018 RPSEC STUDENT PROGRAMS RESERVATION REQUEST

Completed forms may be emailed to [RPSEC@usca.edu](mailto:RPSEC@usca.edu); or mailed to RPSEC, Box 3, USC Aiken, 471 University Parkway, Aiken, South Carolina 29801; or faxed to 803-641-3615.

You can find this form and other information at: <http://rpsec.usca.edu/student/>. You may also call us at (803) 641-3313.

Teacher's Name: \_\_\_\_\_ Birthdate (mm/dd): \_\_\_\_\_

Last four digits of SS#: \_\_\_\_\_ Home Phone: \_\_\_\_\_ Cell Phone: \_\_\_\_\_

E-mail Address (program reminder sent via e-mail): \_\_\_\_\_

Home Mailing Address (confirmation contract sent via postal mail): \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

School: \_\_\_\_\_ District/County: \_\_\_\_\_ Grade Level: \_\_\_\_\_

School/Organization Phone: \_\_\_\_\_ Special Education Needs (Y or N): \_\_\_\_\_

Name(s) of other teacher(s) who will attend: \_\_\_\_\_

## PROGRAM REQUEST INFORMATION

Number of students visiting PER DAY: (10 min, 90 max) \_\_\_\_\_ Scheduling entire grade level? \_\_\_\_\_ If YES, total # of students: \_\_\_\_\_

How many programs would you like to request PER DAY? (check one): \_\_\_\_\_ 1 program \_\_\_\_\_ 2 programs \_\_\_\_\_ 3 programs

Please reference our **Field Trip Directory for Monthly Pairings**. Programs are **NOT offered every month**.

### FIRST CHOICE

MONTH: \_\_\_\_\_

Program #1: \_\_\_\_\_

Program #2: \_\_\_\_\_

Program #3: \_\_\_\_\_

### ALTERNATE CHOICE

SELECT A DIFFERENT MONTH THAN 1<sup>ST</sup> CHOICE/WILL BE USED IF 1<sup>ST</sup> CHOICE IS UNAVAILABLE

MONTH: \_\_\_\_\_

Program #1: \_\_\_\_\_

Program #2: \_\_\_\_\_

Program #3: \_\_\_\_\_

If available, please use my alternate choices to schedule a 2<sup>nd</sup> visit for this school year. (Y or N) \_\_\_\_\_

Check ANY of the days of the week that you CAN visit:

\_\_\_\_ MONDAY \_\_\_\_ TUESDAY \_\_\_\_ WEDNESDAY \_\_\_\_ THURSDAY \_\_\_\_ FRIDAY

Check ANY of the times that you **CAN START YOUR FIRST PROGRAM**:

\_\_\_\_ 9:15 AM \_\_\_\_ 10:30 AM \_\_\_\_ 12:00 PM \_\_\_\_ 1:15 PM \_\_\_\_ OTHER: \_\_\_\_\_

What is the **latest time** that you will need to leave the RPSEC? \_\_\_\_\_

\_\_\_\_ CHECK HERE if you are planning on using our CAFETERIA/CLASSROOMS for lunch.

Our center **DOES NOT** provide lunches but you are welcome to bring a bag lunch for your visit.

List ANY specific dates that you CANNOT visit:

COMMENTS:

OFFICE USE ONLY:

OFFICE USE ONLY: Date Received