

## **What is a Planetarium?**

The planetarium is an indoor sky theater where a realistic simulation of the night sky is presented. The immersive environment of a planetarium engages the learner and allows learning to occur in ways not possible in an ordinary classroom. In a planetarium it is possible to experience and observe the night sky from any point on earth and at any time in history. Days and years can be compressed into minutes. A planetarium provides an opportunity for people to observe and experience sky phenomena that normally could not be seen except over a period of days, months, or years, and with extensive travel to other parts of the world. In the planetarium, concepts about astronomy can be demonstrated in ways that would be impossible in a regular classroom. The planetarium visit should add information, drama and awe to knowledge the student already possesses. The primary purpose of a planetarium is to motivate the learner to seek new knowledge and to stimulate curiosity. It is an opportunity to sit back and immerse yourself into a place of enchantment under a star-filled sky.

## **About the Smith Planetarium**

The Smith Planetarium has 92 seats and includes a 40' dome that has at its center a new "Konica-Minolta MediaGlobe II Planetarium Projector". The planetarium building is handicapped accessible. Various audiovisual special effects enhance the presentations. Presentations are informal and flexible. Complexity may be adjusted up or down depending upon the maturity of the audience. Teachers should specify the desired program when making reservations. Otherwise, groups will be given a program at the discretion of the planetarium educator. The planetarium operates from October 2nd through December 13<sup>th</sup> and from January 14<sup>th</sup> through May 14<sup>th</sup>. The planetarium experience requires approximately one hour including time for check-in, restroom use, etc. Programs last 35-50 minutes and program length is dependent upon grade level and attention span. Most days have three programs scheduled for: 9:15 AM, 10:30 AM, and 12:00 PM. Public programs are presented on the first Sunday afternoon of each month at 2:30 PM and on the last Tuesday evening of each month at 7:30 PM, unless the date falls during a time period of vacation or there is inclement weather. Check with the planetarium staff before coming. **Note:** The planetarium is closed if Walker County Schools are closed due to a vacation break or due to an emergency, such as weather.

## **Mission of the Smith Planetarium:**

To use the night sky to motivate students, sparking their wonder and curiosity.

To provide students with an opportunity to see and experience the night sky as realistically as possible while learning about science with an expert staff person who can answer questions.

The primary purpose is to motivate the learner to seek new knowledge and to create an awareness of the cosmos, encourage creative and critical thinking, and spark wonder and curiosity about our world.

The Smith Planetarium is focused primarily upon students in Walker County Georgia and secondarily upon the public as a whole. The planetarium provides live educational programs that help learners grasp concepts that are best understood in a three-dimensional environment. A planetarium experience affords an opportunity for learners to become immersed into a place of enchantment, under a star-filled sky.

## **Brief History of the Smith Planetarium**

James Alonzo Smith was the founding director of the first planetarium in Walker County. It opened in March 1967 and closed in 1998 to make way for the new Rock Spring Elementary School. At that time, the school board hoped to relocate the planetarium to another site. That has now happened with the construction of this new planetarium.

The most prominent supporters of a new planetarium were the voters in Walker County. They went to the voting polls on three separate occasions over a 12-year period and voted every time in favor of a special one-cent sales tax in E-SPLOST referendums. The Planetarium was listed on these ballots as a proposed project. Walker County citizens in all three referendums approved it. In 2005, grant funding from the Space Telescope Science Institute/NASA was secured in the amount of \$50,000 for Mission Discovery: Project StarWalker. This funding helped clinch the local decision to rebuild a new planetarium in Walker County.

At least 60 individuals worked to complete this planetarium with a 40' (12.2-meters) dome and a Konica-Minolta MediaGlobe II digital planetarium projector. **Dr. Wayne Robinson** and **James "Jabo" Sims** are the two individuals who worked continuously on re-establishing this planetarium. Dr. Robinson served as the Director of the Walker County Science and Technology Center and as the first Director of the Smith Planetarium until his retirement in June 2011. **Kim McCroskey** followed Dr. Robinson as head of the Walker County Science & Technology Center and Mr. **Carl B. Allen, Jr.** was the first "planetarium educator" in the new facility. The Smith Planetarium was named in honor of two retired educators: **James Alonzo Smith** and his wife, **Shirley R. Smith** on May 4<sup>th</sup> 2011.

Normal operations were delayed by a tornadic (Gustnado) storm on June 18<sup>th</sup>, 2011. **Michael Tipton** followed Kim McCroskey as Coordinator of Instructional Technology and Internet Services. The planetarium is a part of Mr. Tipton's responsibilities. **James A. Smith** is the current planetarium educator.

**Location:** The Smith Planetarium is a part of the Walker County Science and Technology Center. The physical address is 409 Pond Springs Road, Chickamauga, GA 30707. Telephone: 706-375-8001. (fax: 706-375-8028) The city of Chickamauga is southwest of Chickamauga Military Park and west of US Highway 27.

*Geographic coordinates of the planetarium are: Latitude N 34.8535 / Longitude W 85.3136*

**Driving Instructions:** From the center of Historic Chickamauga (at traffic light) travel south 1.6 miles on Cove Road (GA Hwy 341); then turn right (west) on Pond Springs Road. After 0.3 miles the planetarium is on your left.

## **About Program Presentations**

Programs vary according to grade level and curriculum objectives. Night and day, sky motions, star patterns, earth's motion and the change of seasons are observed. Students are introduced to various constellations, myths, and motions of the night sky. During the program, participants become visually acquainted with constellations common to each season. Seasonal change due to length of the day, angle of the sun, tilt of the earth's axis and sunlight intensity is discussed. Students become visually acquainted with the meridian, celestial equator, the ecliptic and phases of the moon. The real meaning of time designations A.M and P.M. are demonstrated. How to stay found with some navigational-astronomy is often included. Most lessons include a digital video. Slides and/or videos are used as learning aides to supplement the lesson.

## Curriculum Standards

Below is a list of the Performance & Content Standards that are often addressed during the planetarium experience:

**Georgia Performance Standards (GPS) for 2<sup>nd</sup> Grade:** Earth Science Co-Requisite – Content Standards include: S2E1a, S2E2c and S2E2d

**Tennessee Content Standards** in Earth & Space Science for 2<sup>nd</sup> & 3<sup>rd</sup> grade include: SPI 0207.6.1, SPI 0207.6.2, SPI 0307.6.1

**Georgia Performance Standards (GPS) for 4<sup>th</sup> Grade:** Earth Science Co-Requisite - Content Standards include: S4E1a-c, and S4E2a-c

**Georgia Performance Standards (GPS) for 6<sup>th</sup> Grade:** Earth Science Co-Requisite – S6CS5a,b, S6E1a,b,c,d,e,f, S6E2a,b,c

**Tennessee Content Standards** in Earth & Space Science for 3<sup>rd</sup> thru 6<sup>th</sup> grade include: SPI 03204.1.8, SPI 0407.6.1, SPI 0407.6.2, GLE-0507.6.2, SPI 0507.6.1, SPI 0507.6.2, SPI 0507.6.3, SPI 0607.6.4

**National Science Education Standards**

**NS.K-4.4 EARTH AND SPACE SCIENCE** - Objects in the sky & Changes in earth and sky

**NS.5-8.4 EARTH AND SPACE SCIENCE** - Earth in the solar system

Next Generation Science Standards: ESS 5.SSS 1A

Next Generation Science Standards: ESS 5.SSS 1B

Next Generation Science Standards: MS-SS.ESS.1A

Next Generation Science Standards: MS-SS.ESS.1B

Next Generation Science Standards: HS-SS.ESS.1.A

Next Generation Science Standards: HS-SS.ESS.1.B

## Preparation and Planning

Some study should be done prior to the planetarium visit to acquaint students with some astronomical terminology.

**Tips on Visiting:** Restroom facilities are limited at the planetarium so, students should go to the restroom before leaving their home school. In planning your trip, allow time before the program for a brief restroom break before and after the program.

No food (snacks, bag lunches) or drinks are allowed in the planetarium or in the planetarium lobby. However, we have a climate-controlled “display & meeting” room with tables & chairs for groups as large as 92 people. Teachers and students may use that area to eat box lunches brought from their school. Please leave the area clean. To use the “display & meeting” room, make arrangements with planetarium secretary when making reservations. Our 92-seat planetarium seems to be adequate for three (3) classroom size groups. With larger groups of 4 to 6 classrooms, teachers may decide to divide their group and allow part of the group to eat lunch while the others are in the planetarium and then switch out. Teachers are wise to plan a useful activity for students during lunchtime.

Please consider leaving large items such as backpacks at home, in the bus, or in your car. Lockers are not available. Children are very different, but as a general rule, planetarium programs (even kindergarten-level productions) are not recommended for children under four years of age. Our programs are suitable for ages five and up.

**Note:** Our campus is smoke-free and use of tobacco products are prohibited.

## Planetarium Admission Costs for School Groups

The planetarium staff and facility is in no way motivated by revenue, politics, tourism, or other similar considerations. However, a planetarium is a facility that needs to be operated, serviced, and kept current. As a result, a small admission fee is charged to groups who visit the facility. A charge of \$4.00 per student is charged for admission to help supplement the cost of equipment and materials used by the planetarium. Teachers and up to 4 adults per classroom are admitted free. Keep in mind that maximum seating capacity is 92, plus some space for wheelchairs. Payment should be made by check or purchase order to Walker County Schools and it must indicate that it is for planetarium admissions and reference the date & group name. Payment by check or a purchase order should be made upon arrival at the planetarium.

## How to Schedule

Reservations can be made by calling: (706) 375-8001 (Monday through Friday from 9:15 to 11:30 A.M. and from 1:30 to 4:00 P.M.). if no answer call 706-375-3493. More often than not, planetarium visits by school groups are scheduled for either Tuesdays or Thursdays. You are encouraged to register as far in advance as possible. Please make reservations at least a week before you wish to come.

**Before making a reservation,** please have the following information handy:

Your school name, contact person's name, address, phone numbers and email where you can be contacted.

Grade level and the number of classes and the total number of students and adults that will be attending.

We also need to know the number of people in your group that are in wheelchairs. If you have more than 2 people in wheelchairs, some regular seating must be removed and that will therefore reduce the number of regular seats available.

Program title(s) requested -

Preferred date and time with two alternative dates.

Have your calendar handy in case your chosen date(s) are filled.

Before calling to make a reservation, determine bus availability.

**Note:** The Planetarium has a maximum seating capacity of 92 plus some space for wheelchairs. If your group is larger, arrangements for two separate programs will be necessary. See “Tips on Visiting” below.

**Cancellation Policy:** Advance cancellation notice is required. If you fail to cancel your appointment, a deposit will be required for all future scheduled appointments by your school. The deposit will be non-refundable, but will be deducted from the total bill when your group checks in.

The Planetarium secretary will eMail or mail (via USPS) a written confirmation for each program reservation. Please verify that the date, time and requested program are correct. Cancellations should be reported immediately.

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