



University of  
South Australia

# Planetarium

## About the Planetarium...

The planetarium is located at the *University of South Australia Mawson Lakes* and is part of the *School of Natural and Built Environments*.

It contains a *Zeiss ZKP-1* star projector that simulates the starry sky on an 8 metre dome and has seating for 45. The projector provides a remarkably realistic sense of being under the real night sky. It is used to show the sky as seen from the southern hemisphere, pointing out constellations, the Milky Way, the Magellanic Clouds and where to look for planets. It also demonstrates the general celestial motions that cause the sky to appear different at various times of the night and year.

The planetarium is also equipped with a digital MirrorDome projection system by which our astronomy educators can take the audience on a virtual guided tour of the solar system and the universe.

We accommodate the level of information from junior primary school right through to adult level.



While it is one of the smaller planetaria (yes that's the plural) in Australia, it has the advantage that we can interact with the audience and their questions. We find this often provides a unique and rewarding experience for the visitor.

## How to get the best out of the Planetarium experience...

Students that are prepared in advance with some information about the solar system, space exploration and stars are more likely to ask questions and get value from the session.

Sessions are pitched at the age grade level so that information and the experience can be easily followed.

A good place to start with basic information aimed at different age levels can be found at the following web link: <http://www.windows.ucar.edu/>

Monthly Southern Star maps can be downloaded for free from the following website: <http://skymaps.com>

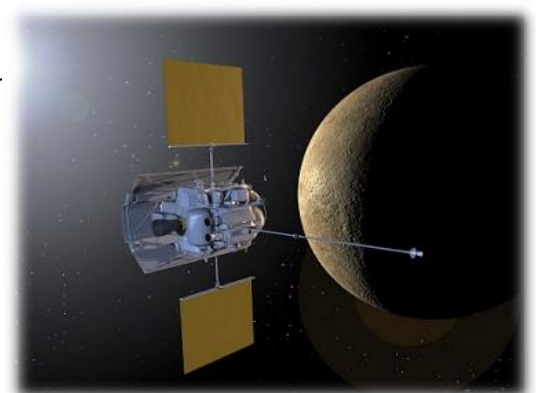
\*\*Be sure to select the southern hemisphere version for the current month.

We follow the SACSA Framework Strand: Earth and Space.

Some topic ideas for students to research or ask about during their planetarium session:

### Sky and Space

- What are constellations?
- What is the difference between a star and planet?
- Why does the Moon change phases during the month?



- How does the cycles of the Sun and Moon affect us on Earth?
- Which animals use the stars for navigation?
- How far out have humans travelled into space?
- What can a pair of binoculars show in the sky?

#### Solar System topics

- The order and distances of planets
- The difference between rocky planets and gas giants
- Why are gas giants so big and rocky planets so small?
- Where do asteroids and comets come from?
- How was the moon formed?
- Find out more about planetary exploration with space craft

#### Basic questions about the stars

- What is a star?
- How are stars formed and how do they die?
- The nature of the Milky Way (is it a galaxy?)
- How big is the Milky Way?
- How old is the universe?
- What are black holes?
- Have we found life out in space?



Teachers may also request that we cover particular topics or streams. For example in the past some school groups requested topics in the *Jason Project*.

### Some useful information when visiting the Planetarium...

As the planetarium is located within the *School of Natural and Built Environments* there are often classes and tutorials in progress in adjacent rooms. We ask that you keep your students quiet as they come up the stairs and while entering the planetarium and that once inside the planetarium that students respect the equipment and seating.

- Cost: \$3.50 per student and \$5.00 per adult (teachers included free of charge)
- For very small groups here is a minimum group booking cost of \$70.00.
- The Planetarium has a maximum seating capacity of 45 people
- Mobile phones should be turned off. No torches or other lights are allowed.
- Be aware that the lights will be turned down and it will be dark for most of the session.
- If you want to take photos inside the planetarium please ask the astronomy educator running your session.
- A session lasts for an hour, or more, depending on the time requested by the organisers of the group.
- Toilets are located on the same floor as the planetarium, diagonally across the foyer.
- A parking information sheet will be provided to the organiser of the visit once the booking is confirmed.

**TO BOOK:** call Jean on 8302 3138 or email: [jean.srisamnant-cooper@unisa.edu.au](mailto:jean.srisamnant-cooper@unisa.edu.au)

or email web booking form found at [www.unisa.edu.au/planetarium/school](http://www.unisa.edu.au/planetarium/school) to Jean.

**We trust that you and your students will find the planetarium visit educational and enjoyable!**

