

UWA 2018/19 Summer School

Our Solar System (SCIE1122)

Welcome

Thank you for your interest in UWA's annual Summer School, an additional teaching period not only designed to provide additional flexibility and teaching innovation for our existing students, but also an opportunity for members of the general public to expand knowledge in a particular area of interest, up-skill and progress your career to the next level or embark on another chapter of life-long learning.

This year's UWA Summer School runs from late November 2018 until early February 2019 and includes nearly 60 units. Our Summer School units cover a range of engaging topics across various disciplines and embed practical application and experiential learning.

I encourage you to visit study.uwa.edu.au/summer, the UWA Summer School website for more information about all units on offer, the enrolment process and available services.

We look forward to welcoming you to the UWA Community this summer.

Professor Graham Brown

(Dean of Coursework Studies (Acting))





Your Unit

Unit Name: Our Solar System (SCIE1122)

Location: Perth Campus

Non-assessed Fee: \$1148 (Enjoy the complete educational experience but without the stress of assignments)
Assessed Fee: \$1148 (Enjoy the complete educational experience, including assignments/ exams and receive a

final mark. The earned credit can be counted towards a future qualification at UWA)

Dates: 7 January 2019-15 February 2019

Time: Fridays, 9am – 12pm *Note: there will also be a field work session on Wednesday 8th January, 2pm

-10:30pm

Explore traditional beliefs and modern discoveries of astronomy. Learn about the planets within our own solar system, and the potential for life-bearing planets beyond Earth.

Description:

For countless millennia, people have yearned to understand our connection to Earth's nearest neighbours. In this unit, you'll explore modern discoveries about our astronomical companions, their internal structure and how they were created, as well as traditional beliefs about the universe across global cultures, with particular focus on the rich cultural tradition of Australian Aboriginal solar system astronomy. Then, you'll explore theories about the origin of life and ask where else we may discover life in the universe.

Learning outcomes:

In this unit, you will:

- discover different cultural perspectives on the Sun, the planets, and other solar system objects;
- learn about the physical processes that led to the diversity of the planets, the special properties of planet Earth, and the evolution of life on planet Earth;
- practice gathering information and presenting it with clarity and depth of understanding; and
- learn about extrasolar planets and life in the universe.

Lecturer:

Associate Professor David Coward

Associate Professor David Coward's early work was on gravitational waves, modelling, and simulation of gravitational wave background noise. He developed a new data analysis algorithm to record temporal and spatial pattern of rare events in data to predict the occurrence of even rarer events. Coward has worked with the LIGO Scientific Community, the E.M. follow-up of gravitational wave events, the UWA Zadko Telescope project, and the high-energy detector satellite mission XMM-Newton. He is a chief investigator for the ARC Center of Excellence for Gravitational Astronomy.

Other information:

This unit includes a unique field night experience for hands-on astronomy, and features special lectures and workshops with astronomy and space scientist experts.

Additional costs:

\$25 for Field Trip to Gravity Discovery Centre, Gingin - Food and facility costs only, transport will be provided by the school

Contact details:

David.Coward@uwa.edu.au

Summer School Logistics:

- All external applicants will receive a parking permit to allow them to park on-campus, free of charge.
 See transport.uwa.edu.au for information about parking areas, and check your permit for more details when you receive it.
- All students will receive a PHEME account and access to the online learning system (LMS), online library and course materials.
- Free on-campus WIFI will be available through your PHEME account.
- The UWA Summer School Precinct includes a number of cafes with extended opening hours during Summer School. Visit the Student Guild website for more information.
- Summer School students will have access to the Reid Library and all its facilities: computers, charging stations, electrical outlets, printers/ copiers, rest areas, group study facilities, private study areas, and of course, the librarians and library staff.
- Lockers and change rooms are available in the Reid Library.
 Bike racks are located throughout campus. End-of-journey shower facilities are available at the Fitness Centre.
- Information about public transport and cycling to UWA can be found at transport.uwa.edu.au.
- Further information, including course materials, timetable information, PHEME details, and campus maps, will be provided prior to commencement of the unit.