

## Camden Open Day 2018

## For Year 9&10 Students



Camden Open Day is a full day program especially designed for high school students in years 9-10 interested in the environment, agriculture, science and veterinary science.

### Timetable 2018

| Start   | End     | Activity                              |
|---------|---------|---------------------------------------|
| 9.30am  | 9.55am  | Arrival and Registration              |
| 10am    | 11am    | Dr Karl's Great<br>Moments in Science |
| 11.10am | 11.40am | Activity A                            |
| 11.50am | 12.20pm | Activity B                            |
| 12.25pm | 1.00pm  | Lunch                                 |
| 1.10pm  | 1.40pm  | Activity C                            |
| 1.50pm  | 2.10pm  | Closing Lecture                       |

9.30AM-2.15PM Friday June 15th, 2018415 Werombi Rd, Camden\$15 per studentBBQ Lunch provided

Explore the fascinating world of agriculture, environment, science and veterinary science. Do hands-on workshops, hear captivating talks and meet scientists conducting cutting edge research.

The day starts with a welcome and Dr Karl Kruszelnicki's funny fact-filled talk, then students have the opportunity to attend three workshops to experience the variety that agriculture ad veterinary science have to offer.

The day finishes with an exciting talk from Dr Paola Corneo. Paola studies the interactions between plants and the microorganisms in the soil. These interactions are fundamental parts of the carbon and nitrogen cycles.

Camden Open Day is a full day of amazing agriculture, vibrant veterinary science and scintillating science!

sydney.edu.au/science/outreach



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#### **Activities**

Each class of up to 30 students will participate in three of the below activities.

#### Calf Health, Production and Welfare

During this workshop, students will interact with dairy calves to learn how to identify and assess normal and pain behaviours by observing posture, gait, feeding and social interaction. This activity will help students understand the importance of behaviour as a tool for measuring welfare and productivity.

#### Crop Genetics: Planned Parenthood vs Designer Babies

Students will look at how plants have been genetically modified by humans using both traditional plant breeding techniques and genetic engineering. They'll explore the concepts behind what genetic modification really means, how each method works, and the potential risks and benefits of both. This is followed by an activity where students will learn the traditional plant breeding technique of hand-crossing.

#### Avian, Reptile and Exotic Pet Hospital Clinic Tour

The Avian Reptile and Exotic Pet Hospital (AREPH) is Australia's only purpose built state-of-theart exotic veterinary hospital. Learn about the treatment and care of birds, reptiles, wildlife, small mammals such as rabbits, guinea pigs and ferrets, and other unique animals including fish, hermit crabs, spiders and amphibians.

#### **Emerging Technologies in Agriculture**

Infrared thermography (IRT) detects infrared energy emitted from an object, converts this into a temperature and produces a 'thermogram' which displays temperature distribution. Find out how IRT can help evaluate animal health and identify problems in animals remotely. Students will use different IRT instruments to look at objects within the room and outside to understand how infrared technology works. They will also get to see how many different factors may affect the reliability of these measurements and suggest potential methods that may help to reduce these effects.

#### Fin-tastic Exploration

Students will learn about the unique biological features and adaptations that make a fish a fish. We will explore how the different adaptations allow for fish to live in diverse environments from the high arctic to warm tropical reefs and to identify which adaptations are best for fish farming.

#### What lies beneath? Investigating soil.

What makes soil, soil? It's more than just "dirt", it's home to millions of microorganisms, A-invertebrates and plants. Understanding the soil and its properties is important as it helps regulate atmospheric carbon and is a major store of carbon. This is crucial in the fight against climate change! Get your hands dirty with soil chemical testing, examine microorganisms under the microscope and identify the different insects who call soil home.

#### University Veterinary Teaching Hospital Clinic Tour

Join our 'behind the scenes' tour of the Veterinary Teaching Hospital. Students will view a Nuclear Scintigraphy, MRI and a high speed treadmill for horses.

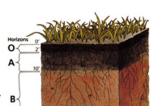














## **School Programs Terms and Conditions**

By registering to this event I represent to the University of Sydney ("University") that I have read, understood, and agree to the terms and conditions of registration for a particular cohort of students for a Schools Program ("Program") as set out below:

- The University will hold the requested number of places. If circumstances change or student numbers change, I understand that I am required to inform the University by email to science.alliance@sydney.edu.au as soon as possible. The final date to make changes is 20 business days before the booked session.
- Student numbers will be finalised 20 business days prior to a booked session. There will be a cost (incl. GST) per student for each activity and this cost will be agreed on at the time of booking.
- For online payment facility using a credit card at time of booking, a receipt will be provided upon payment. For pay later facility, I understand that I will be invoiced for the number of students confirmed 20 business days before the booked session and payment should be made to 'The University of Sydney'.
- If a booking is amended or cancelled less than 20 business days prior to the booked session, the session fee is non-refundable.
- The University may consider a request to change sessions and will endeavour to facilitate a reasonable change if requested more than 20 business days prior to a booked session, however, it cannot guarantee that a change may be made. If no change is possible and the requisite 20 business days notice has been provided, a full refund will be issued.
- Refunds will not be given for non-attendance or partial attendance, and make-up sessions will not be provided.
- The University reserves the right to alter any of the arrangements for the Program (including the venue and staff participating) and to cancel the Program, although every effort will be made to provide the Program in a manner similar to that published. If the Program is not held for any reason then the University of Sydney's liability is limited to the registration fee only.
- I acknowledge that the Program may involve activities that are potentially dangerous and I agree to abide by all directions of the University including its employees agents, contractors and volunteers.
- I warrant that I have obtained consent to attend from the parents and guardians of all students attending the Program.

sydney.edu.au/science/outreach

For more information

School Programs Officer

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