2013 SCIENCE EXPERIENCE HOBART

Tuesday 15 January

8:45am: Registration – University Centre

9:00 – 9:20am Welcome and Introduction (Life Sciences LT1)

9:30 – 10:25am: ZOOLOGY (Life Sci room 222, Jodie Gruber and Ben Halliwell)
Zoology is the branch of biology that studies animals, including their structure, function, growth, origin, evolution, and distribution. Visiting the School of Zoology, you'll how to identify and distinguish mammalian and other vertebrate skulls that you might come across while out bushwalking.

10:30 – 10:50am Morning tea (Life Sciences foyer)
During morning tea, please sign up for one of the two excursions for Wednesday.

11:00 – 1:00pm PSYCHOLOGY (Psychology foyer, Michael Garry)
Psychology is concerned with the scientific study of human behaviour and experience, and with applying our understanding to help individuals and groups. We'll demonstrate some of the techniques we use and discuss how these can be applied.

1:00 – 1:50pm BBQ Lunch & group photo (Ref steps)

2:00 – 3:50pm CHEMISTRY (Chemistry laboratory, Trevor Lewis)
You'll synthesise and purify the common analgesic aspirin (the active ingredient in Aspro™, Soluble Aspirin™ etc) and then check your synthetic skill by testing the purity of your product. You'll then make two different polymers: the synthetic rubber Thiokol, important because it was one of the first rubber compounds ever made in a laboratory and useful because it is stable in most solvents (nice, but very smelly chemistry); and the really neat (but not so commercially important) polymer known as Slime, important because it is fun to play with, but it's a great example of wonderful chemistry too!

4:00 – 4:25pm UNIVERSITY LIFE (Chemistry tea room, Emma Atkinson)
This general introduction about going to university and university life will include information on pathways to university, choosing the course that's right for you, the UTAS lifestyle, scholarships, support services and prerequisite subjects to study in year 11 & 12 specific to science-related programs.

4:30pm Finish at University Centre

Wednesday 16 January

8:45am Meet outside University Centre

9:00 – 10:30am EARTH SCIENCES (meet at Geology foyer, Michael Roach)
Find out how seismic waves travel, how they are recorded and what they tell us about the structure of the earth. Use petrological microscopes to look at the micro-textures of a variety of important Tasmanian rocks.

10:30 – 11:00am Morning tea (Engineering foyer)
Sign up for one of the sessions tomorrow morning. Numbers are limited for these so decide early!
Wednesday 16 January (continued)

11:00 – 12:50pm  ENGINEERING  (meet at Engineering foyer, Susie Haley)
Do you know how many different kinds of engineering there are? What do they all do? Take part in an engineering challenge that will have you thinking outside the square, solving problems in a fun way that you never thought possible.

1:00 – 1:45pm  Pizza Lunch  (Uni Centre foyer)
Please be on the bus to depart at 1:45pm!

1:45 – 4:30pm  OFF-CAMPUS EXCURSIONS – Please choose either

UTAS RADIO TELESCOPE AND GROTE REBER MUSEUM  (Cambridge, Karen Bradford)
Discover the amazing world of radio astronomy and see an impressive 26m radiotelescope donated to UTAS by NASA. Find out why radiotelescopes are important and explore the solar system through amazing 3D virtual reality shows. See how the two disciplines of maths and physics combine in the study of the stars - and beyond...

UTAS MEDICAL SCIENCES  (Hobart, Amanda Harper)
If you’re interested in studying any aspect of the health sciences, then this is the excursion for you! Visit the facilities at the Hobart Clinical School next to the Royal Hobart Hospital, including the Pathology Museum with its range of preserved specimens, selected microscopic specimens and “specimen of the week” – and find out more about careers in the health sciences.

4:30pm  Bus returns to University Centre

Thursday 17 January

8:45am  Meet outside University Centre

9:00 – 10:30am  PLEASE CHOOSE ONE OPTION:

PLANT SCIENCE  (Plant Science Labs, Assoc. Prof. Mark Hovenden)
Botanical forensics – is your honey what its label says it is? Compare different honey samples in the lab, look for the clues and find out where your honey actually came from.

10:40 – 11:00am  Morning tea  (Uni Centre foyer)
Please be on the bus to depart at 11am!

CSIRO Education & Greening Australia  (Mt Nelson, Jenni Burdon)
CSIRO Education has recently moved to a purpose-built sustainable building on Mt Nelson. There is a strong focus on environmental sustainability in the new CSIRO Education Centre, which is shared with Greening Australia. Learn about biodiversity, sustainability and environmental science.

1:00 – 1:45pm  Lunch  (salad rolls, Uni Mall)

AGRICULTURAL SCIENCE  (Life Sciences, Kelly Spence)
In Australia, agricultural scientists can be found working from WA to NSW, and NT to Antarctica. They research new products, study food safety, advise industry and farmers, as well as solving environmental problems. At the School of Agricultural Science, you’ll be involved in several hands-on activities in our laboratories, experiencing the science that relates to agriculture.

3:45 – 4:30pm  CLOSING AND REVIEW  (University Centre)