

## Spectacular Science 2019 – Bees!

Year 7-8 Day, Wednesday 20 November

Year 9-11 Day, Thursday 21 November

(accepting Year 7-8s by special request)



Let your class explore the multidisciplinary nature of science at Spectacular Science! Find out how our scientists are researching the lives of “Bees!” from every angle - native habitat, flight patterns, hierarchy of the hive, pests and disease, honey quality, pollen and nectar collecting and more. Your students will be positively buzzing to get their feelers into the hands-on activities...!

### Activity Options (final list pending)

- Agriculture
- Archaeological Science
- Chemistry
- Geosciences
- Mathematics
- Physics
- Psychology
- Veterinary Science

**Costs** \$24.20 (inc GST) per student, includes cost of workshops and shows.  
No catering provided.

### Registration

Register your class of students using the link below:

<http://sydney.nicheit.com.au/web/registration/start/285>

Three workshop preferences and risk assessments will be provided to registered schools closer to the date in mid-October.

*Allergy note: students will not be handling live bees.*

### Schedule

Time	Activity
8.30am-9am	Sign-in at Footbridge Theatre, Camperdown
9am-10am	<b>Spectacular Speaker!</b> <i>Professor Madeleine Beekman (Wed)</i> <i>Dr Karl Kruszelnicki (Thurs)</i>
10am-10.15am	Morning tea
10.15am-11.15am	<b>Activity Option 1</b>
11.15am-12pm	<b>Activity Option 2</b>
12pm-1pm	Lunch
1pm-2pm	<b>Activity Option 3</b>
2pm-3pm	<b>Spectacular Science Show!</b> <i>Flames, explosions and smoke – oh my!</i>
3pm	End of Event

## The 2018 Examples of Activities at Spectacular Science

Curious of what sorts of activities we will provide? Feel free to peruse what we have done in the past below. This year, our workshops will all be “Bees!” themed and the list and risk assessments will be provided to registered classes closer to the event. Students will not be handling or interacting with live bees.

### 2018 Spectacular Science Activities

#### **Archaeology – Archaeological Science**

*This tour of the Nicholson Museum and hands-on session will explore the way science has been used to understand past cultures: from chemical dating methods, conservation techniques, scanning and Lidar, and medical investigations of human remains. Discover how science has enabled us to ask new questions about the ancients.*

#### **Anatomy – Skeleton Skills**

*Students will have the chance to handle (plastic) human and (real) animal bones. We will work at putting a skeleton together in anatomical order, practice distinguishing between human and animal bones, and identify bones from x-rays.*

#### **Chemistry – Slimy, Sub-Zero Chemistry**

*Students will learn the chemistry of making slime, and will freeze a range of materials in liquid nitrogen - and smash them of course!*

#### **Geosciences – Predicting Global Disasters**

*Students act as Red Cross workers that need to make decisions about how and when to respond to natural disasters. Can climate forecasts help humanitarian workers to make more informed decisions? How can the costs of disaster relief be effectively managed?*

#### **Mathematics – Mathematical Games**

*We play games all the time, both simple and complex, and many of our games have mathematical content. We'll explore some mathematical games and the ideas behind them.*

#### **Physics – How to be a Physicist**

*What tools and tricks do Physicists use? How do we "do" Physics and who does it? Discover how the process of Physics works by doing real science with real scientists. From the Universe to the Atom, you'll see the process of Physics from the start to the finish. A day of experimentation, discovery and questions and answers, all in the name of Physics.*

#### **Psychology – Forensic Psychology and Lie Detection**

*Can a jury trust eyewitness testimony? We'll explore the intersection between psychology and the justice system, and participate in a practical lie detection activity.*

#### **Veterinary Science (Years 9-11 Only) – Parasitology**

*There are three major groups of parasitic animals: protozoan, helminths (worms) and arthropods (insects). We investigate several ways to study parasites to deduce sudden death in domestic animals.*

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#### **For more information**

Caitlin Fisher, School Programs Officer (Acting)

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