

STEM X Academy

7-12 January, 2018, Canberra

Secondary Teachers Program

Sunday 7 Jan	Monday 8 Jan	Tuesday 9 Jan	Wednesday 10 Jan	Thursday 11 Jan	Friday 12 Jan
	Welcome				
	Bus to Questacon	Welcome to CSIRO What is CSIRO? At CSIRO we do the extraordinary every day. We push the boundaries of science and technology, and its innovation for the future that excites us the most.	Bus to Questacon	Recap and refresh What were you working on two days ago?	Set up STEM Xpo presentation
	Welcome to Questacon		Warm-up activity	CSIRO Tours A CSIRO scientist takes you behind the scenes and into their laboratory to get a first-hand experience of their work.	Group A STEM Xpo sessions Share your week's learnings with others at the STEM Xpo, reflecting and celebrating your experience at the STEM X Academy.
	Protostorming Protostorming is a hands-on process using quick thinking and simple materials to rapidly create simple STEM models and activities	Skillset sessions 1&2 In our Skillset sessions, you will focus on and explore STEM skills in depth with our trained Education Specialists. Each session highlights a different aspect of STEM in the classroom.	Working with STEM stories Start to brainstorm and prototype hands-on project ideas for your students, based on STEM stories from Monday	Future Scenario project Continue working on your scenario challenge.	
	Simple science activities Undertake a simple hands-on science activity and start to adapt or extend the activity for your students				
	Morning Tea	Morning tea	Morning Tea	Morning tea	Morning Tea
	Diving deeper into simple science Continue to adapt and enrich other familiar science activities with inquiry-based approaches. Also hear from STEM X Alumni who have created new inquiry-based activities to complement their existing units of work	Skillset session 3 In our Skillset sessions, you will focus on and explore STEM skills in depth with our trained Education Specialists. Each session highlights a different aspect of STEM in the classroom.	Makerspace in schools Makerspaces are great for students STEM-based explorations. We hear from STEM X Alumni who have introduced maker-style activities and spaces in their schools or libraries, and we share some simple principles to keep in mind if you're planning on doing the same	CSIRO Scientist Keynote Hear from our scientists here at the CSIRO about the work they do.	Group B STEM Xpo sessions Share your week's learnings with others at the STEM Xpo, reflecting and celebrating your experience at the STEM X Academy. STEM X Alumni Speakers Closing and certificates
	Transferring ideas in STEM (Part A) Investigate examples of how STEM professionals can take one idea and creatively apply it to solve a range of STEM-based problems. This session kick starts how you could try the same approach within your classroom	Future scenario project Over the week you will work in small groups to solve a challenge of the future.	Working with STEM stories for STEM Xpo Develop content and prototypes representing a STEM story project you'd like to run with your students. This will form part of your STEM Xpo presentation on Friday	Skillset session 4 In our Skillset sessions, you will focus on and explore STEM skills in depth with our trained Education Specialists. Each session highlights a different aspect of STEM in the classroom.	Bus to Bentspoke Brewery
	Lunch	Lunch	Lunch	Lunch	Lunch @ Bentspoke
	Transferring ideas in STEM (Part B) Continue to build upon ideas from Part A by exploring and creating activity or project ideas using common key STEM ideas or components	Future scenario project Over the week you will work in small groups to solve a challenge of the future.	Working with STEM stories for STEM Xpo (continued)	Future Scenario project Finalise your scenario challenge ready for presentation at the STEM Xpo.	
	Introduction to STEM Stories Hear various STEM stories which highlight how STEM professionals often come together with a range of expertise and tools to solve problems.		Bus to Geoscience	Optional switch of locations	Bus to ANU or airport
		Free Time	Geoscience	Finalise STEM Xpo at Questacon or CSIRO	
Welcome to Canberra Registration/check in	Bus to ANU	Bus to Mount Stromlo Observatory	Bus to ANU	Bus to ANU	
Drinks and nibbles	Free time	Lecture by Ben Greene - Space Junk	Free time	Free time	
Dinner	Happy hour drinks			Bus to formal dinner	
Activities	Dinner @ ANU	BBQ dinner	6pm dinner at ANU for people heading to optional Questacon excursion Bus to Questacon	Formal dinner	
		Lecture by Brad Tucker - Astronomy	Optional Questacon excursion Experience Questacon's seven galleries full of hands-on exhibits and the Q Shop full of science toys, books and education kits. As you work your way through the galleries, you may even pick up ideas for displays that you can build for your own classroom		
	Graham Walker show	Bus to ANU	Bus to ANU	Bus to ANU	

DRAFT OUTLINE

STEM X Academy

7-12 January, 2018, Canberra

Primary Teachers Program

Sunday 7 Jan	Monday 8 Jan	Tuesday 9 Jan	Wednesday 10 Jan	Thursday 11 Jan	Friday 12 Jan
	Welcome	Welcome	Optional Botanical Gardens tour		
	<p>Welcome to CSIRO What is CSIRO? At CSIRO we do the extraordinary every day. We push the boundaries of science and technology, and its innovation for the future that excites us the most. What does tomorrow look like and how can we prepare for it today?</p>	<p>Bus to Questacon</p>	<p>Recap and refresh What were you working on two days ago?</p>	<p>Bus to Questacon</p>	<p>Set up STEM Xpo presentation</p>
	<p>Skillset sessions 1 & 2 In our Skillset sessions, you will focus on and explore STEM skills in depth with our trained Education Specialists. Each session highlights a different aspect of STEM in the classroom.</p>	<p>Welcome to Questacon</p>	<p>CSIRO Tours A CSIRO scientist takes you behind the scenes and into their laboratory to get a first-hand experience of their work.</p>	<p>Warm-up activity</p>	<p>Group A STEM Xpo sessions Share your week's learnings with others at the STEM Xpo, reflecting and celebrating your experience at the STEM X Academy.</p>
	<p>Morning Tea</p>	<p>Protostorming Protostorming is a hands-on process using quick thinking and simple materials to rapidly create simple STEM models and activities</p>	<p>Future scenario project Continue working on your scenario challenge.</p>	<p>Working with STEM stories Start to brainstorm and prototype hands-on project ideas for your students, based on STEM stories from Monday</p>	
	<p>Morning Tea</p>	<p>Simple science activities Undertake a simple hands-on science activity and start to adapt or extend the activity for your students</p>	<p>Morning Tea</p>	<p>Morning Tea</p>	<p>Morning Tea</p>
	<p>Skillset session 3 In our Skillset sessions, you will focus on and explore STEM skills in depth with our trained Education Specialists. Each session highlights a different aspect of STEM in the classroom.</p>	<p>Diving deeper into simple science Continue to adapt and enrich other familiar science activities with inquiry-based approaches. Also hear from STEM X Alumni who have created new inquiry-based activities to complement their existing units of work</p>	<p>CSIRO Scientist Keynote Hear from our scientists here at the CSIRO about the work they do.</p>	<p>Makerspace in schools Makerspaces are great for students STEM-based explorations. We hear from STEM X Alumni who have introduced maker-style activities and spaces in their schools or libraries, and we share some simple principles to keep in mind if you're planning on doing the same</p>	<p>Group B STEM Xpo sessions Share your week's learnings with others at the STEM Xpo, reflecting and celebrating your experience at the STEM X Academy.</p> <p>STEM X Alumni Speakers</p> <p>Closing and certificates</p>
	<p>Future scenario project Over the week you will work in small groups to solve a challenge of the future.</p>	<p>Transferring ideas in STEM (Part A) Investigate examples of how STEM professionals can take one idea and creatively apply it to solve a range of STEM-based problems. This session kick starts how you could try the same approach within your classroom</p>	<p>Skillset session 4 In our Skillset sessions, you will focus on and explore STEM skills in depth with our trained Education Specialists. Each session highlights a different aspect of STEM in the classroom.</p>	<p>Working with STEM stories for STEM Xpo Develop content and prototypes representing a STEM story project you'd like to run with your students. This will form part of your STEM Xpo presentation on Friday</p>	<p>Bus to Bentspoke Brewery</p>
	<p>Lunch</p>	<p>Lunch</p>	<p>Lunch</p>	<p>Lunch</p>	<p>Lunch @ Bentspoke</p>
	<p>Future scenario project Over the week you will work in small groups to solve a challenge of the future.</p>	<p>Transferring ideas in STEM (Part B) Continue to build upon ideas from Part A by exploring and creating activity or project ideas using common key STEM ideas or components</p>	<p>Future Scenario project Finalise your scenario challenge ready for presentation at the STEM Xpo.</p>	<p>Working with STEM stories for STEM Xpo (continued)</p>	
		<p>Introduction to STEM Stories Hear various STEM stories which highlight how STEM professionals often come together with a range of expertise and tools to solve problems. We start to experiment with how you may implement examples from these STEM stories in your classroom or community.</p>		<p>Bus to Questacon/CSIRO</p>	
		<p>Bus to ANU</p>	<p>Bus to local place of interest</p>	<p>Time to work on your STEM Xpo content, display or model</p>	<p>Bus to ANU or airport</p>
		<p>Free Time</p>	<p>Local place of interest</p>		
		<p>Bus to Mount Stromlo Observatory</p>	<p>Bus to ANU</p>	<p>Bus to ANU</p>	
<p>Welcome to Canberra Registration/check in</p>	<p>Free time</p>	<p>Lecture by Ben Greene - Space Junk</p>	<p>Free time</p>	<p>Free time</p>	
<p>Drinks and nibbles</p>	<p>Happy hour drinks</p>			<p>Bus to formal dinner</p>	
<p>Dinner</p>	<p>Dinner @ ANU</p>	<p>BBQ dinner</p>	<p>6pm dinner at ANU for people heading to optional Questacon excursion</p>	<p>Formal dinner</p>	
<p>Activities</p>	<p>Graham Walker show</p>	<p>Lecture by Brad Tucker - Astronomy</p>	<p>Bus to Questacon</p>		
			<p>Questacon excursion Experience Questacon's seven galleries full of hands-on exhibits and the Q Shop full of science toys, books and education kits. You may even pick up ideas for displays that you can build for your own classroom.</p>		
		<p>Bus to ANU</p>	<p>Bus to ANU</p>	<p>Bus to ANU</p>	

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