Regional Science Exchange with John Monash Science School
Year 10 Students in 2017

Talented Year 10 students from across regional Victoria with a passion for science are invited to attend John Monash Science School (JMSS) in Melbourne for a three-week block in 2017.

JMSS is Victoria’s first specialist secondary school focused on science, mathematics and associated technologies. The curriculum at JMSS challenges students to explore cutting-edge scientific knowledge from our Emerging Sciences electives including Marine Biology, Nanotechnology, Pharmaceutical Science, and “From Cells to Systems” (anatomy, physiology, infectious diseases, cancer, neuroscience and stem cells) as well as traditional science subjects. JMSS is within the grounds of Monash University and works in partnership to develop curriculum, and provide workshops and career directions for JMSS students. For more information please visit our website at www.jmss.vic.edu.au.

You can watch a video from previous students on our website in the “Students” section under the heading “Regional Science Exchange” or click this link: http://www.jmss.vic.edu.au/jmss/3058/regional-science-exchange?frm_id=63

Visiting students will benefit from working with a large group of keen scientifically-minded students, as well as inclusion in School Houses with Staff Mentors. Students need to bring two devices such as laptop/iPad/tablet/smartphone (limited resources available to borrow from JMSS), and students will be required to complete science projects after their three-week block. Students will return to JMSS to present their projects for peers, parents, teachers and academics at our annual Science Fair in October. The program fee is $490.

We’ve taken on board feedback about the timing of the program to help prepare students for subject choices for Year 11, and to allow more time for students to complete their research projects. The program will run in Term 2, Weeks 4, 5 and 6 (7th to 26th May 2017).

Schools are also expected to nominate a Science or Maths Teacher to undertake Professional Learning with JMSS for either 2 days (in person or via video-conferencing) or a full 5 days (in person) in the last week of students’ visit, to observe and participate in team teaching, technology use and curriculum development at JMSS. Regional schools are asked to cover transport, CRT and 2 nights’ accommodation costs. If teachers attend 5 days of professional learning the additional accommodation cost will be covered by JMSS.

Time Frames

- The application process will commence in February 2017. Students will apply directly to their school, and schools will shortlist applicants and submit applications to JMSS by 2.00pm on Thursday 9th March 2017.
- Successful applicants will be notified by email of their acceptance or otherwise on Thursday 16th March 2017.
- Successful applicants and their family are required to attend an induction meeting with the JMSS staff in regional areas in Term 2 (details to be confirmed, and will also be available by video-conference).
- Students will attend JMSS for a 3-week block:
  - Term 2, Weeks 4, 5 and 6 (Sunday 7th May to Friday 26th May 2017).
• Students will be billeted out as part of a home stay arrangement with JMSS families. A Welcome Lunch for parents, students and host families will be held at JMSS on Sunday 7th May at 12pm. All families are welcome to attend, including brothers and sisters. Students will be encouraged to stay with the host family at least one weekend during their 3-week block to experience Melbourne. Weekends are to be negotiated directly with the homestay family.

• Students will return to JMSS for our Science Fair in October 2017 where they will present their projects to an audience of their peers, teachers, academics and our parent community.

Curriculum

All students will enrol in JMSS Year 10 curriculum and will be able to continue their studies in core subjects like English and Mathematics while at JMSS. JMSS also offers a range of Unit 1 and 2 studies. Students work in both single and double classes with team teaching, and can benefit from sharing information and discussion with up to 50 peers.

Visiting students will also enrol in one of JMSS’s Enrichment Science electives. These studies are only available at JMSS and have been co-constructed with assistance from Monash University Academics. Students will be able to nominate their preferences from:

- Nanoscience and Nanotechnology,
- Marine Biology,
- From Cells to Systems (Biomedical Science including Stem-cell technology),
- Our Dynamic Earth (Geosciences),
- From Logic to Magic (Enhanced Mathematics),
- Bioinformatics (Decoding the Genome),
- Imaging Science,
- From Quarks to Quasars (Astrophysics), and
- Pharmaceutical Science.

The final class allocation will depend on timetables and class numbers. Students will undertake three weeks of study in one of these electives. JMSS is running classes online with Emerging Sciences Victoria (ESV) in 2017 with more information available at www.emsci.vic.edu.au. Any students (whether on exchange or not) are eligible to participate in ESV classes for a semester at a time.

Costs

The costs of this initiative are shared by the family, school and JMSS. JMSS will cover school-related costs such as supervision for all school and group activities, as well as a JMSS uniform rugby jumper. Regional students will have access to JMSS academic and careers’ support, counselling and pastoral care. Students will have homestay arranged for them either with JMSS families or identified families who have had experience with hosting international students. Students will also be paired up with a JMSS buddy to support them in their new learning environment.

Participants’ schools and families are asked to contribute the $490 program fee and organise their own transport from home to Melbourne and return, including car pooling and public transport options. It is hoped schools will assist with costs and travel arrangements. Applicants may wish to approach local service clubs, community groups and local businesses to sponsor their place on the program, or set up fundraising activities.
Teachers are expected to attend either a 2-day or 5-day Professional Development, and asked to arrange their own transport and meals. Teachers and schools are asked to cover the first 2 nights’ accommodation costs, and JMSS will cover additional nights’ accommodation for teachers participating in the 5-day PD.

**Selection Criteria**

The program is open to Year 10 students in 2017 who have talent, interest, curiosity and enthusiasm in the areas of Science, Mathematics and/or Technology. To apply students need to:

- Describe your interest in science/maths/technology in a maximum of **one A4 typed page**.
- Describe in **200 words or less** how you will use this opportunity back in your school and/or home town after the experience is over, or how it might impact your future subject or career choices.
- Please consider and list any possible issues regarding being away from home for 3 weeks, eg: part-time work, sporting commitments, experience staying away from home. Please advise if you are studying any VCE (Year 11 and 12 subjects) in Year 10, and approximately how much work will be required during your 3-week block.
- Applications must include the name of the student, home address and names of parent/s, as well as contact details of the school, science teacher contact, and principal. Geographical location of students’ homes and schools attended will also be considered. Indigenous students are encouraged to apply.
- Teachers are asked to provide a summary of students’ academic performance over the period Year 7-9 with particular reference to science, mathematics and technology capabilities. Please comment on student potential and the value of the program to the student and school. Maximum of **one A4 typed page**.

**Application Process**

Applications are invited from students across regional Victoria. Schools are asked to shortlist up to 3 students, and forward their applications to media@jmss.vic.edu.au by 2.00pm on Thursday 9th March 2017. Please note: students may not all be offered a place. Schools will be notified of success or otherwise by Thursday 16th March.


**Virtual School - ESV**

All Year 9 and 10 students around Victoria are invited to study subjects such as nanotechnology and astrophysics for a whole semester with JMSS via Emerging Sciences Victoria (ESV). It’s $125 per student per semester, and all you need is a computer with headphones and a microphone, and access to the internet. Study with us in real-time and collaborate online with students around Victoria. There are 2 x 1 hour classes per week with some additional preparation tasks and homework. A great extension for students with an interest or passion for science, or used as a science elective, and anywhere from 1 to 50 students may participate. For more information please visit [www.emsci.vic.edu.au](http://www.emsci.vic.edu.au)