



THE UNIVERSITY OF NOTRE DAME AUSTRALIA

MEDIA RELEASE

July 2020

Notre Dame teams up with Sydney Catholic Schools to support students studying maths

The University of Notre Dame Australia has hosted a day of expert-led workshop sessions for Year 12 students enrolled in Mathematics Extension 2 at Sydney Catholic Schools.

On Tuesday 7 July, almost one hundred Year 12 students and 24 teachers from Sydney Catholic Schools attended the Maths Extension 2 Day at Notre Dame's Sydney campus to gain insights from experts including Anna Wethereld, Mathematics and Numeracy Inspector at NSW Education Standards Authority (NESA), and Dr Alan McCarthy, Notre Dame's Program and Discipline Coordinator in Mathematics.

Also presenting workshops on the day were mathematician and independent educator Morris Needleman, and Cynthia Athayde, Mathematics Coordinator at Aquinas Catholic College. The expert presenters ran sessions on four key topics that are examined in the Maths Extension 2 course: Vectors, Proof, Mechanics With Resisted Motion and Mechanics Without Resisted Motion.

"STEM skills are vital to future employment and economic growth. The Extension 2 Mathematics Day is an opportunity for Notre Dame to partner with Sydney Catholic Schools to contribute to meeting this need by inspiring Year 12 mathematics students to excellence," says Dr Cate Thill, Dean of the School of Arts & Sciences at Notre Dame. "Collaborations such as this are essential to improving performance and participation in mathematics at higher levels."

This is the second year that Notre Dame and Sydney Catholic Schools have collaborated on this event, which offers the opportunity for high school students, teachers and other experts to share knowledge, strategies and ideas to help increase the number and achievement of students studying high-level mathematics for the HSC.

"We can't improve student performance if we don't increase our own knowledge of higher levels of mathematics and mathematics teaching – as a system and as individual teachers," says Christine Mae, Mathematics and Numeracy Specialist K-12 at Sydney Catholic Schools. "This day was an opportunity for students to hear from experts, but also for teachers to hear from other professionals who might teach the same content, but in different ways."

Learning other, potentially more advanced, ways of thinking through a range of problems and solution approaches is important in Mathematics Extension 2 because the marks awarded in this course don't just come from getting the right answer; they reflect the elegance, efficiency and clarity of a student's mathematical communication and reasoning. "The session on Proof, led by Anna Wethereld, Nikky Vanderhout and Jodie Acheson from NESA, focused on different ways of thinking about problems to find solutions," says Christine. "I'm hoping that this helps students develop a greater range of approaches so that they realise they may be able to solve the same problems, but in more sophisticated ways."

Given that this is the first year the new syllabus for Maths Extension 2 is being examined in the HSC and there are topics that teachers may not have taught before, the other major benefit of the event for both students and teachers was the chance to learn about those topics from someone who has been teaching them for years. Dr Alan McCarthy ran the workshop on Vectors, which is content not previously examined in mathematics for the HSC – this means there are no examples of what the questions might be like for students and no past papers to practice on. "This is where the partnership with the university is invaluable," says Christine. "External input from someone like Alan will be very helpful."



THE UNIVERSITY OF NOTRE DAME AUSTRALIA

MEDIA RELEASE

The value of bringing people who share a passion for maths together for peer collaboration was clear in the attendance numbers on the day – almost every student studying the course in Sydney Catholic Schools nominated to attend the event during their school holidays.

Domremy College student Tabitha Ong is the only student at her school studying Mathematics Extension 2 and, for her, the day offered a rare opportunity to work collaboratively and bounce ideas off new people. “It was nice listening to other teachers talk about maths and being able to see things from a new perspective. Meeting people who are really interested in maths and can apply it to real life makes it more interesting for me, too,” says Tabitha. “Coming up to trials, I need consistent motivation to keep studying and this day helped me get ahead of the bunch.”

Accompanying Tabitha on the day was her teacher, Basil Capizzi, who also attended the 2019 event. “It’s hard for Tabitha to gauge where she is at in relation to the rest of the cohort, so at this event she gets a chance to see that when she finds a question difficult, other students are finding similar questions difficult and it builds confidence for her around the fact that she is travelling well in the course. It’s hard to work that out on your own,” he says.

“Apart from getting a fresh perspective on the content, as a teacher this day also offers some reinforcement of what you’ve done in the class and gives you an idea of what you could change, what you could spend more time on and what you think you’ve covered well. It’s very helpful, especially for new topics,” he added.

The Mathematics Extension 2 Day will be followed up with another Notre Dame/Sydney Catholic Schools event in September, which will take direction from student feedback and address any particular subject areas they request help with in the lead up to HSC.

The University of Notre Dame Australia is offering an Undergraduate Certificate in Mathematics program fully online in Semester 2. Click [here](#) to find out more.

Media Contact:

Nancy Merlo +61 2 8204 4044 | **+61 415 517 589** | nancy.merlo@nd.edu.au