

Online Workshops for Teachers of Secondary School Mathematics

Four presenters who prepared for the now-cancelled 2020 MASA Annual Conference, have come together to create this online series of 6 sessions in Term 3. Register for as few or as many as you wish. Sessions are \$15 each. Zoom invitations will be sent to registrants. Certificates of attendance will be issued after the event.

August 6th 4pm – Barry Kissane – Calculus concepts and calculators

Have your Graphics Calculator Ready (BK will use Casio)

Sound learning of the calculus requires students to understand a number of key concepts, such as rate of change, derivative function, limit and convergence. Graphics calculators offer many opportunities to help students engage with these sorts of concepts; we will explore some of these opportunities together in this hands-on workshop.

September 10th 5pm – Deb Woodard-Knight – Specialist Maths NOTE NEW DATE

This is a repeat of the session on teaching tips held at the MASA Year 12 Conference night in February. Techniques and tips on the teaching of Specialist Maths will be discussed and hopefully, the session will also promote open discussion with others sharing ideas.

August 13th 4pm – Jennifer Chalmers – Combining S.T.E. and M through the use of design challenges

Experience how maths can be taught alongside science, technology and engineering to provide students with real life applications and context for the learning, ensuring engagement in, and motivation for, the subject.

August 13th 5pm – Barry Kissane – Sequences, series and calculators

Have your Graphics Calculator Ready (BK will use Casio)

Sequences and series are fundamental mathematical ideas, and so there are a number of ways in which they can be represented, profitably investigated and efficiently handled on graphics calculators by students, to develop intuitions and understandings as well as to solve practical problems. We will explore some of these together in this hands-on workshop.

August 20th 4pm – Jennifer Chalmers – Using SCINEMA films to put maths in context

The SCINEMA International Film Festival showcases the best scientific films from around the world. These are then curated into playlists for schools to use film as the perfect medium to engage students in a formative and entertaining way. See how to use the films and associated resources here.

August 20th 5pm – Constantin Naum – Power of Matrices and their real power

The use of "the power of matrices" in determining the general term of a sequence given in the recursive form. EG, finding the general term of the Fibonacci sequence by using matrices. The use of the graphics calculator, the mathematical induction and diagonalization of a matrix processes will be used.

