Attention:
Teachers of Years 11 and 12 MATHEMATICS (2 unit)

MANSW presents ...

Making Mathematics (2 unit)
Meaningful and Memorable

Presented by Stuart Palmer

Are you looking for some creative ways to make the Mathematics (2 unit) course more accessible and engaging for your students?

Stuart has taught this course numerous times to students of all abilities. He will share a wealth of teaching ideas and resources that will help your students to develop deeper understanding and greater fluency in this demanding course.

Some use of computer technology will be included, but little experience or expertise is required. Participants will receive a package of ready-to-use electronic files.

This course is suitable for both new and experienced teachers of Preliminary and HSC Mathematics.

See page 3 for venues and dates

Topics covered include: (see the following page for more details)

Day 1: Real Functions, Trigonometry, Plane Geometry, Probability, Series
Day 2: Calculus, Curve Sketching, Logarithmic and Exponential Functions

A school registering for both days may send Teacher A on Day 1 and Teacher B on Day 2.

See the following pages for course overview, dates and venues

Registration Fee: $132 per day, including GST, for MANSW members. ($198 per day for non-members) Concessions for pre-service full time students are available on request.

To register: Complete an online registration at http://www.mansw.nsw.edu.au/events/category/secondary-professional-learning

Closing dates for registration: Refer to the list on the following page. Please register soon to avoid disappointment.

For more information, please email projects@mansw.nsw.edu.au or call 02 9715 5800.

Completing each day of Making Mathematics (2 unit) Meaningful and Memorable will contribute 5 hours and 30 minutes of QTC Registered PD addressing 1.1.2; 1.2.2; 1.5.2; 2.1.2; 2.2.2; 2.6.2; 3.2.2; 3.4.2; 6.2.2; 6.4.2; 7.4.2 from the Australian Professional Standards for Teachers towards maintaining Proficient Teacher Accreditation in NSW.
Day 1:
**Real Functions, Trigonometry, Plane Geometry, Probability, Series and more!**

A scope and sequence and teaching program that works. So many concepts, so little time!

Making sense of functions with the function machine

Domain, range, even functions, odd functions, continuity, limits and all of that stuff

How to solve locus problems

How to be a good grapher (pre-calculus)

The discriminant: what it is and how to use it

How to use technology to fully understand the unit circle and the sine curve

What are radians (with a cake and 3 rulers) and why are they useful?

Trigonometric graphs without the tears and tantrums.

Illustrating geometry theorems with GeoGebra and Geometer’s Sketchpad

“I know how to solve geometry problems but I don’t know how to write down the reasons”

Some engaging probability simulations

A self-guided PowerPoint tour of series and their applications

Making sense of superannuation and loans, with Excel

Day 2:
**Calculus, Curve Sketching, Logarithmic and Exponential Functions and more!**

Assessing student achievement in your school

Moderating, mapping and scaling 2 Unit HSC marks and calculating the ATAR

Teaching and learning resources

How NOT to lose your students in their very first calculus lesson

How to avoid the ‘too much information about calculus’ syndrome

Understanding ‘first principles’

How to use technology to develop greater understanding of calculus and curve sketching

How to be a good grapher (post-calculus)

A user-friendly approach to max/min problems

Simplifying Simpson’s rule, teaching the trapezoidal rule and getting into the Glycaemic Index

Introducing logarithms with a bread roll called a bap

What is $e$ and why is it approximately equal to 2.7?

Displacement, velocity & acceleration and growth and decay

If you would like to be removed from this distribution list, please send an email containing the name of your school and your fax number to projects@mansw.nsw.edu.au.

ABN: 31 164 921 721
| Dates and Venues | Cooma Ex-Services Club | Day 1: Wed 25 Feb 2015 (8:45 am to 3:30 pm)  
Day 2: Thurs 26 Feb 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
|---|---|---|
| South Coast  
Monaro | Cooma Ex-Services Club  
106 Vale Street  
Cooma NSW 2630 |  
| Illawarra  
Shoalhaven  
South Coast | Wests Illawarra Leagues Club  
1 Hargreaves Street  
Unanderra NSW 2533 | Day 1: Thurs 12 Mar 2015 (8:45 am to 3:30 pm)  
Day 2: Fri 13 Mar 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| New England  
North West  
North Coast | Armidale Ex-Services Club  
137 Dumaresq Street  
Armidale NSW 2350 | Day 1: Thurs 26 Mar 2015 (8:45 am to 3:30 pm)  
Day 2: Fri 27 Mar 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| Central Coast  
Hunter | Newcastle: Club Macquarie  
458 Lake Road  
Argenton, Newcastle NSW | Day 1: Wed 1 April 2015 (8:45 am to 3:30 pm)  
Day 2: Thurs 2 April 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| Mid North Coast | Wauchope Country Club  
King Street  
Wauchope NSW 2446 | Day 1: Thurs 23 April 2015 (8:45 am to 3:30 pm)  
Day 2: Fri 24 April 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| North Coast  
Ballina | Ballina RSL Club  
240 River Street  
Ballina NSW 2478 | Day 1: Wed 6 May 2015 (8:45 am to 3:30 pm)  
Day 2: Thurs 7 May 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| Central West  
Orana  
Far West | Dubbo RSL Club  
178 Brisbane Street  
Dubbo NSW 2830 | Day 1: Tues May 19 2015 (8:45 am to 3:30 pm)  
Day 2: Wed May 20 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| Central Coast  
Hunter | Central Coast Leagues Club  
Dane Drive  
Gosford NSW 2250 | Day 1: Thurs May 21 2015 (8:45 am to 3:30 pm)  
Day 2: Fri May 22 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| Blue Mountains  
Central West | Bathurst Panthers  
132 Piper Street  
Bathurst NSW 2795 | Day 1: Tues May 26 2015 (8:45 am to 3:30 pm)  
Day 2: Wed May 27 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| Riverina  
Murray | Wagga RSL Club  
Kincaid Street  
Wagga Wagga NSW 2650 | Day 1: Tues June 16 2015 (8:45 am to 3:30 pm)  
Day 2: Wed June 17 2015 (8:45 am to 3:30 pm)  
Registrations close 1 week prior |
| Far West | Royal Exchange Hotel  
320 Argent Street  
Broken Hill NSW 2880 | Day 1: to be advised  
Day 2: to be advised  
Registrations close 1 week prior |
| Sydney North | TBA | Day 1: to be advised  
Day 2: to be advised  
Registrations close 1 week prior |
| Sydney South | TBA | Day 1: to be advised  
Day 2: to be advised  
Registrations close 1 week prior |
| Sydney West | TBA | Day 1: to be advised  
Day 2: to be advised  
Registrations close 1 week prior |
| Sydney East | TBA | Day 1: to be advised  
Day 2: to be advised  
Registrations close 1 week prior |

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