

Senior Science & Mathematics Workshops for Gold Coast Teachers

26 June 2019, 3.30pm - 6.30pm

Marymount College, 261-283 Reedy Creek Rd, Burleigh Waters QLD 4220

3.30pm - 4pm

Registration and Refreshments

All workshops run from 4pm - 6.15pm

Biology: Data Analysis of Unit 3 Mandatory Practicals - Dr Gurion Ang

Important: this PD builds on skills developed in Senior Biology Data Fun Days. You will require a laptop with Microsoft Excel 2013 or upwards (Windows or Mac). We will review the mandatory practicals in Unit 3 of the new senior biology syllabus, and propose appropriate statistical tests to analyse and interpret data collected from these practicals. We will use authentic data sets from fieldwork to show how to analyse the data to test for critical ecological concepts.

Chemistry: Research Investigation and Assessment Criteria - Associate Professor Gwen Lawrie

We will explore developing research questions, identifying and validating primary data from relevant sources, analysing and displaying data and evaluating a claim. In addition, specific examples linked to SHE subject matter, structure of organic materials, chemical synthesis and design will be considered.

Physics: Quantum Theory, and The Standard Model - Dr Ian McCulloch

We will cover Unit 4, Topics 2 and 3 of the new Physics syllabus, including concepts underlying quantum theory, the connection between quantum theory and blackbody radiation, the photoelectric effect mandatory practical, The Standard Model of particle physics, and particle interactions.

Specialist Mathematics: Proofs and Matrices - Dr Barbara Maenhaut

This session will cover content on Proofs (Unit 1, Topic 3 - Introduction to Proof, and Unit 3, Topic 1 - Proof by Mathematical Induction) and Matrices (Unit 2, Topic 3 - Matrices, and Unit 3, Topic 2 - Vectors and Matrices).

6.15pm-6.45pm

Refreshments and Networking

Register here

www.staq.qld.edu.au/pd-events/professional-development/

Note: Regional teachers will have access to this PD in the second half of the year. Metro teachers will have access to this PD during the STAQ-UQ Senior Science Day and QAMT-UQ Senior Mathematics Day in November 2019.

