

The Teaching of Mathematics

Course Code	Course Title	Course Category	No. of AUs	Semester Offered	Pre-requisites
QCM50C	Teaching and Learning of Primary Mathematics I	Core	3	January	-
QCM50D	Teaching and Learning of Primary Mathematics II	Core	2	January	-
QCM50E	Teaching and Learning of Primary Mathematics III	Core	2	July	-
QCM50G	Assessment in Primary Mathematics	Core	2	July	-

QCM50C Teaching and Learning of Primary Mathematics I

The main objective of this course is to equip pre-service teachers with a basic understanding of the learning theories that inform mathematics instruction as well as an overview of the Singapore Mathematics Curriculum. The course also seeks to develop pre-service teachers as reflective teachers of mathematics. The content of this course includes learning theories, lesson planning, and teaching of mathematical topics: Whole Numbers, Fractions and Decimals.

QCM50D Teaching and Learning of Primary Mathematics II

The main objective of this course is to promote the theory-practice nexus by providing opportunities for pre-service teachers to use pedagogical principles and learning theories to inform their planning and practice of mathematics classroom skills. The course also seeks to develop pre-service teachers as reflective practitioners. The content of this course includes the role of ICT in mathematics education, and teaching of mathematical topics: Geometry, Measurement, Data Representation and Interpretation, and Data Analysis.

QCM50E Teaching and Learning of Primary Mathematics III

The main objective of this course is to further promote the theory-practice nexus by providing opportunities for pre-service teachers to apply pedagogical principles and learning theories to inform their planning and enactment of mathematics lessons in the context of the real, complex, and interactive classrooms. Lessons will be extended to those that involve mathematical problem solving which promotes higher order thinking. The course further seeks to develop pre-service teachers as reflective practitioners. The content of this course includes the teaching of mathematical problem solving, and teaching of mathematical topics: Percentage, Ratio, Rate, and Algebra.

QCM50G Assessment in Primary Mathematics

The main objective of this course is to provide pre-service teachers with an overview of assessment literacy for the primary mathematics classroom: assessment of learning, with an emphasis on holistic assessment; assessment for learning, with an emphasis on diagnosis and remediation; and assessment as learning, with an emphasis on the metacognitive development of the learners. The content of this course includes both the construction of test items for pen-and-paper assessment as well as construction of other modes of assessment.