

**PGDE PROGRAMME  
TEACHING AT SECONDARY LEVEL**

## CURRICULUM STRUCTURE

The curriculum structures for various specialisations of the PGDE (Secondary) programme are shown in Tables 2 and 3 below:

**Table 2: Curriculum Structure of the PGDE (General, Secondary) Programme**

Category/ Subject	Module Code	Title	No. of AUs
<b>EDUCATION STUDIES</b>			
	QED520	Educational Psychology I: Theories and Applications for Learning and Teaching	2
	QED521	Educational Psychology II: Providing for Individual Differences in Learning and Teaching and Classroom Management	2
	QED522	ICT for Engaged Learning	2
	QED523	The Social Context of Teaching and Learning	2
<b>EDUCATION STUDIES (Select 1)</b>			
	QED560	Computer Supported Collaborative Learning	2
	QED561	Technologies as Cognitive Tools	2
	QED562	Designing Effective Learning Environments	2
	QED563	Games and Simulations for Learning	2
	QED564	Designing for Communities of Practice	2
	QED565	Surviving and Thriving as a Beginning Teacher	2
	QED566	The Learning School: Innovation and Enterprise	2
	QED567	Creating Connections in the School Community	2
	QED568	Exploring Issues in Philosophy of Education	2
	QED569	Teachers as Leaders	2
	QED570	Multiculturalism in Singapore Schools	2
	QED571	Schooling in Meritocratic Societies	2
	QED572	Moral Education Across the Curriculum	2
	QED573	Psychology of Learning and Motivation	2
	QED574	Assessment and Alternative Assessment to Promote Thinking	2
	QED575	From Extrinsic Motivation to Passion: Diversified Approaches to Learning	2
	QED576	Developing Creativity in the Secondary Classroom	2
	QED577	Counseling and Guidance in Secondary Schools	2
	QED578	Youth At-Risk: From the Classroom to the Courtroom?	2

Cont'd

Category/ Subject	Module Code	Title	No. of AUs
	QED579	Facilitating Sexuality Education in Secondary Schools	2
	QED580	Understanding Social Behaviour of Secondary School Students	2
	QED581	Differentiating Instruction for Able Learners	2
	QED582	Teaching Students with Behavioural and Learning Problems	2
<b>CURRICULUM STUDIES (Any two as assigned)</b>			
	QCB	The Teaching of Biology	9
	QCY	The Teaching of Chemistry	9
	QCQ	The Teaching of Computer Applications	9
	QOA	The Teaching of Elements of Office Administration	9
	QCE	The Teaching of English Language	9
	QCR	The Teaching of English Literature	9
	QCG	The Teaching of Geography	9
	QCH	The Teaching of History	9
	QCM	The Teaching of Lower Secondary Mathematics	9
	QCM	The Teaching of Mathematics	9
	QCP	The Teaching of Physics	9
<b>PRACTICUM</b>			
	QPR520	Teaching Practice	10
<b>LANGUAGE ENHANCEMENT AND ACADEMIC DISCOURSE SKILLS</b>			
	QLK520	Communication Skills for Teachers	2

Note: In addition to the core modules and required number of prescribed electives, student teachers are required to undertake a compulsory Group Endeavours in Service Learning (GESL) project – QGS511. Description on GESL projects is available in page 11.

**Table 3: Curriculum Structure of the PGDE (Chinese, Secondary) Programme**

Category/ Subject	Module Code	Title	No. of AUs
<b>EDUCATION STUDIES</b>			
	QED520	Educational Psychology I: Theories and Applications for Learning and Teaching	2
	QED521	Educational Psychology II: Providing for Individual Differences in Learning and Teaching and Classroom Management	2
	QED522	ICT for Engaged Learning	2
	QED523	The Social Context of Teaching and Learning	2
<b>EDUCATION STUDIES (Select 1)</b>			
	QED560	Computer Supported Collaborative Learning	2
	QED561	Technologies as Cognitive Tools	2
	QED562	Designing Effective Learning Environments	2
	QED563	Games and Simulations for Learning	2
	QED564	Designing for Communities of Practice	2
	QED565	Surviving and Thriving as a Beginning Teacher	2
	QED566	The Learning School: Innovation and Enterprise	2
	QED567	Creating Connections in the School Community	2
	QED568	Exploring Issues in Philosophy of Education	2
	QED569	Teachers as Leaders	2
	QED570	Multiculturalism in Singapore Schools	2
	QED571	Schooling in Meritocratic Societies	2
	QED572	Moral Education Across the Curriculum	2
	QED573	Psychology of Learning and Motivation	2
	QED574	Assessment and Alternative Assessment to Promote Thinking	2
	QED575	From Extrinsic Motivation to Passion: Diversified Approaches to Learning	2
	QED576	Developing Creativity in the Secondary Classroom	2
	QED577	Counseling and Guidance in Secondary Schools	2
	QED578	Youth At-Risk: From the Classroom to the Courtroom?	2
	QED579	Facilitating Sexuality Education in Secondary Schools	2
	QED580	Understanding Social Behaviour of Secondary School Students	2
	QED581	Differentiating Instruction for Able Learners	2
	QED582	Teaching Students with Behavioural and Learning Problems	2

Cont'd

Category/ Subject	Module Code	Title	No. of Aus
<b>CURRICULUM STUDIES</b>			
Chinese Language	QCC520	Teaching of Chinese Language 1	3
	QCC521	Teaching of Chinese Language 2	5
	QCC522	Teaching of Chinese Language 3	2
<b>CURRICULUM STUDIES</b>			
Chinese Literature	QCJ520	Teaching of Chinese Literature 1	2
	QCJ521	Teaching of Chinese Literature 2	4
	QCJ522	Teaching of Chinese Literature 3: IT and Project Work	2
<b>PRACTICUM</b>			
	QPR520	Teaching Practice	10
<b>LANGUAGE ENHANCEMENT AND ACADEMIC DISCOURSE SKILLS</b>			
	QLK520	Communication Skills for Teachers	2
Use of Chinese In Teaching	QLC520	Use of Chinese in Teaching	2

Note: In addition to the core modules and required number of prescribed electives, student teachers are required to undertake a compulsory Group Endeavours in Service Learning (GESL) project – QGS511. Description on GESL projects is available in page 11.

---

## CONTENTS OF CORE MODULES AND PRESCRIBED ELECTIVES

---

### EDUCATION STUDIES

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QED520	Educational Psychology I: Theories and Applications for Learning and Teaching	Core	2	-
QED521	Educational Psychology II: Providing for Individual Differences in Learning and Teaching and Classroom Management	Core	2	-
QED522	ICT for Engaged Learning	Core	2	-
QED523	The Social Context of Teaching and Learning	Core	2	-
<b>Choose one from the following Elective modules :</b>				
QED560	Computer Supported Collaborative Learning	Prescribed	2	-
QED561	Technologies as Cognitive Tools	Prescribed	2	-
QED562	Designing Effective Learning Environments	Prescribed	2	-
QED563	Games and Simulations for Learning	Prescribed	2	-
QED564	Designing for Communities of Practice	Prescribed	2	-
QED565	Surviving and Thriving as a Beginning Teacher	Prescribed	2	-
QED566	The Learning School: Innovation and Enterprise	Prescribed	2	-
QED567	Creating Connections in the School Community	Prescribed	2	-
QED568	Exploring Issues in Philosophy of Education	Prescribed	2	-
QED569	Teachers as Leaders	Prescribed	2	-
QED570	Multiculturalism in Singapore Schools	Prescribed	2	-
QED571	Schooling in Meritocratic Societies	Prescribed	2	-
QED572	Moral Education Across the Curriculum	Prescribed	2	-
QED573	Psychology of Learning and Motivation	Prescribed	2	-
QED574	Assessment and Alternative Assessment to Promote Thinking	Prescribed	2	-
QED575	From Extrinsic Motivation to Passion: Diversified Approaches to Learning	Prescribed	2	-

Cont'd

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QED576	Developing Creativity in the Secondary Classroom	Prescribed	2	-
QED577	Counseling and Guidance in Secondary Schools	Prescribed	2	-
QED578	Youth At-Risk: From the Classroom to the Courtroom?	Prescribed	2	-
QED579	Facilitating Sexuality Education in Secondary Schools	Prescribed	2	-
QED580	Understanding Social Behaviour of Secondary School Students	Prescribed	2	-
QED581	Differentiating Instruction for Able Learners	Prescribed	2	-
QED582	Teaching Students with Behavioural and Learning Problems	Prescribed	2	-

### **QED520 Educational Psychology I: Theories and Applications for Learning and Teaching**

This module provides the foundation for understanding the learner, their development and the psychology of learning. Key areas include: Understanding different aspects of pupil development and how these influence the teaching and learning processes. Psychosocial development, stages of moral development and the self-concept, and theories of intellectual development. Application of psychological principles and learning theories to classroom learning; understanding how pupils learn and how some pupils fail to learn; proactive approaches to motivate and enhance learning, develop creative and critical thinking and problem-solving skills.

## **QED521 Educational Psychology II: Providing for Individual Differences in Learning and Teaching and Classroom Management**

Students with diverse abilities and needs are increasingly found in mainstream schools in Singapore. Greater diversity among students requires pedagogical approaches that are inclusive of the learning needs of all and yet responsive to individual abilities. This module seeks to help student teachers understand the characteristics and needs of diverse learners and how to cater to their needs. This module also seeks to help student teachers acquire and apply basic knowledge and skills in relation to creating conducive learning environments, managing and facilitating teaching and learning activities, and school/classroom discipline. The importance of the practice of proactive classroom management and positive teacher-student relationship will also be emphasized.

## **QED522 ICT for Engaged Learning**

Information and Communications Technologies (ICT) are an important part of classroom environments in Singapore today. In line with MOE's Second Masterplan for IT in Education, this module adopts four major thrusts:

- a) working in teams to modify or create authentic interactive ICT-based learning resources for engaging learners
- b) creating and facilitating online collaborative learning environments
- c) managing ICT learning environments
- d) professional development by independent self-learning of innovative technologies

## **QED523 The Social Context of Teaching and Learning**

This module provides student teachers with an introduction to the Singapore education system that they will be working in. They will need to know the functions of the school system in socializing citizens for economic, political and social roles in the context of a multi-ethnic and multicultural society. They will have the opportunity to understand the rationale of major education policies and new government initiatives that impact the work of school leaders, teachers, students and other stakeholders in order to achieve the Desired Outcomes of Education laid out by the Ministry of Education. At the same time, they will be made aware of the diverse and multiple roles that are played by teachers in the education system.

## **QED560 Computer Supported Collaborative Learning (CSCL)**

CSCL advocates the move away from teacher-centred to student-centred approaches where individuals in the learning community make meaning collaboratively through innovative teaching practices. Knowledge building communities is one strong CSCL dimension. The student teachers will design thinking prompts to support intentional learning; facilitate social negotiation of ideas among students and structure the online environment to help students in organizing emergent understandings.

## **QED561 Technologies as Cognitive Tools**

The participants will be introduced to concepts and research of cognitive tools with applications in international as well as local primary and secondary schools. IT as cognitive tools exhibit how

technologies can be adopted for thinking through epistemic structures such as concept maps.

### **QED562 Designing Effective Learning Environments**

Educators around the world tend to pay more attention to student achievement and only a little attention has been paid to the learning environments. Recent approaches in learning sciences focus on interactive learning environments which consider contextual elements, authentic tasks and learner-centred pedagogies. This module examines innovative approaches such as Communities of Practices (CoPs), inquiry-oriented learning, situated learning and Problem-based Learning (PBL) environments.

### **QED563 Games and Simulations for Learning**

This module deals with using instructional games and simulations for attainment of cognitive objectives, concepts and adding motivation to topics that ordinary attract little student interests. Some emphasis will be given on the value of simulation as problem-based learning in an attempt to immerse the learner in a problem situation. Gaming and simulations are increasingly important and central to cognitive and affective dimensions of learning.

### **QED564 Designing for Communities of Practice**

This module capitalizes on communities of practice to situate learning in rich and meaningful contexts. It capitalizes on the concepts of situated learning, implicit and explicit knowledge, and distributed cognition enabling holistic learning experiences.

Because communities of practice is an increasingly important concept for enacting mindset change in school leaders, strategies for designing and fostering communities are introduced.

### **QED565 Surviving and Thriving as a Beginning Teacher**

This module discusses the various challenges facing beginning teachers in Singapore secondary schools and junior colleges, and aims to better prepare them for their careers. Many teachers find the transition from their teacher preparation year to schools daunting because they often lack an adequate understanding of what lies ahead of them. This module will provide an opportunity for them to discuss and clarify their aspirations, expectations, fears and concerns; understand some of the key roles, responsibilities and challenges awaiting them in their relationships with other stakeholders in the school system; think about their career progression beyond the initial years. The main thrust in this module is on *personal* development and reflection as part of a growth process undertaken in collaboration with the module instructors and other module participants. In other words, there is no “one right track” or “one-size-fits-all” philosophy underlying the module.

### **QED566 The Learning School: Innovation and Enterprise**

There is a buzz on the scene: ‘Innovation and Enterprise’ (I&E). Launched in 2004, this initiative is set to bring Singapore schools to an era of experimentation and change. There are many implications for teaching and learning. There are also many implications for school leaders, teachers and students. This module explains how a learning

school, where staff and students are actively engaged in learning, generates better learning outcomes and inculcates the I&E spirit. The module will be taught through lectures, group work, directed readings, peer teaching and reflection.

### **QED567 Creating Connections in the School Community**

This module explores the concept of ‘social capital’ and how school professionals can leverage on it to build positive school-home-community links with other stakeholders. It examines research on the benefits of parental involvement in schooling and provides an authentic opportunity for basic research into local situations. Participants will gain valuable first-hand (and usually, first-time) experiences on how to conduct small-scale research into specific topics of interest. Foreign students in Singapore, financially-needy students, part-time work among students, smoking among teens, influence of the media on youth, are recent examples of work undertaken by participants in the module.

### **QED568 Exploring Issues in Philosophy of Education**

This module explores philosophical issues in education, in particular the roles of the education system in Singapore. Through films such as *I Not Stupid*, *Dead Poets Society* and *The Simpsons*, the major functions of schools, key policy concerns in education and the implications for teachers and other stakeholders are introduced and discussed. Throughout the module, the student teachers are encouraged to *investigate* – to reflect on, question and establish their own assumptions, beliefs and values on issues relating to the roles of the education system. The module will be taught using films,

seminars, small group sessions with the tutor and Group Investigation (GI).

### **QED569 Teachers as Leaders**

The role of the teacher is becoming increasingly complex. The teacher today must be able to motivate and inspire students, deal diplomatically with parents, negotiate with officials both within and outside the school system, and solicit the support of community and business leaders. In other words, teachers must assume a leadership role both in and outside the classroom. This module provides student teachers with an awareness of the nature and qualities of good leadership, as well as an appreciation of problems and challenges in managing human relations. This module would also be useful in the teaching of Knowledge and Inquiry, GP, CME, and project work.

### **QED570 Multiculturalism in Singapore Schools**

Racial harmony and social cohesion have always been a major national goal in Singapore since independence. However, our understanding of racial harmony is more often than not superficial. In the current government's attempt at political, economic and social renewal, there is need for Singaporeans to make the transition from silent naïve tolerance to a deeper understanding of the different cultural traditions that make up Singapore society. But how do teachers promote racial harmony and social cohesion in the midst of heavy workload, changing curriculum, and an education system that emphasizes economic and academic pursuits? This module will provide student teachers with learning opportunities to appreciate issues relating to multi-ethnicity in the Singapore context, how these issues

surface in school and classroom practices, and creative ways to promote multiculturalism in schools.

### **QED571 Schooling in Meritocratic Societies**

Meritocracy is one of the “sacred cows” of Singapore’s education system. But does this mean that all students experience schooling in the same way? This module explores the implications of such a system for different groups of students (male/female, different racial/ethnic groups; socio-economic status) and some of the challenges these issues might pose for teachers in Singapore. By drawing on teaching and learning experiences in Singapore, as well as other meritocratic systems across the world, participants will have an opportunity to consider different strategies that can be used to manage these challenges.

### **QED572 Moral Education Across the Curriculum**

It has often been pointed out that every teacher is a moral educator. This module is an attempt to show why and how this saying is true. With help of actual examples, the module explores the various facets of a teacher’s work in the classroom, school and community in order to show that all subject teachers teach knowledge which are needed for our students’ complete understanding of their moral obligations within their specific life situations. They do this both within the curriculum and also at co-curricular activities. And beyond promoting the understanding of moral obligations, all teachers also have a role in training students in the commitment, strength of will and skills needed for effective practice no matter what subject they teach and what CCA they conduct.

### **QED573 Psychology of Learning and Motivation**

The module examines learning and motivation theories in the context of student development and learning in variety of contexts – classroom and school activities as well as out-of-school environments. The role of the teacher as a motivator; motivating and demotivating factors affecting learning; and strategies for motivating different types of learners will be examined.

### **QED574 Assessment and Alternative Assessment to Promote Thinking**

This module will discuss the concepts of assessment, measurement, evaluation and testing and the integral role that assessments play in the teaching and learning process. Formative and summative evaluation will be considered employing conventional and alternative assessments to promote thinking. Different ways of assessing students' work and grading will be discussed together with consideration for the broader issues of validity, reliability and objectivity of the results. Problems, issues and research related to assessment will be discussed.

### **QED575 From Extrinsic Motivation to Passion: Diversified Approaches to Learning**

Motivation comes from the Latin verb *movere* (to move). In lay person's term, the idea of motivation is to get us going, keeps us moving, and helps us complete tasks. Despite the commonly held idea, all educators know that getting students to move is no simple task, especially if we want them to move in a direction desired by us. This module will look at the 'what' and 'why' of motivation, and examine 'how' we

can move students from external motivation to nurturing in them a passion for learning by the use of diversified approaches to learning such as multiple intelligences, problem-based learning and differentiated learning.

**QED576 Developing Creativity in the Secondary Classroom**

The psychological principles of creativity development; essential concepts and techniques for promoting and assessing creative thinking in the classroom; the qualities of the creative product; procedures of the creative process; characteristics of the creative person; conditions of the creative environment; psychometric and consensual approaches to the assessment of creativity and individual differences in creativity.

**QED577 Counseling and Guidance in Secondary Schools**

This course introduces the basic concepts and applications concerning the use of individual counseling and group guidance in the school setting. It is designed for teachers as well as teacher-counsellors to learn basic individual counseling skills and basic group guidance skills for developmental, prevention, and intervention work. Simulated practice will be utilized throughout the course for skill acquisition and development.

**QED578 Youth At-Risk: From the Classroom to the Courtroom?**

This course provides student teachers with an in-depth understanding of the nature and causes of

some of the more serious behavioural problems such as gang violence, suicidal tendencies, substance abuse and internet pornography, displayed by at-risk youths today. The course also serves to equip teachers with the appropriate strategies and preventive measures in handling some of these behavioural problems in the classroom before the adolescent faces incarceration in the courtroom. Intervention programmes offered by the Singapore Juvenile Court for handling such acts of deviance will also be discussed in the course.

### **QED579 Facilitating Sexuality Education in Secondary Schools**

This course provides teachers with the content knowledge on human sexuality as well as pedagogic skills to deliver sexuality education to teenagers in secondary schools. Course participants will have the opportunity not only to update basic knowledge of physiological changes and development in adolescents, but also an awareness of attitudes and emotional, cultural and moral issues. Topics such as gender roles, sexual health and behaviour, and intimate relationships as well as issues such as contraception, abortion, homosexuality and the influence of media and the Internet will be addressed.

### **QED580 Understanding Social Behaviour of Secondary School Students**

This course will examine the theories and research on social behaviour. Participants will learn to use developmental guidance to enhance learning and social interaction in the classroom. Issues such as group theories and techniques in group guidance, leadership, decision making, conflict resolution,

social influence, prosocial and help-seeking behaviour, friendships and close relationships, and group problem-solving will be examined.

### **QED581 Differentiating Instruction for Able Learners**

The promise of an ability-driven curriculum and that all students will learn is rhetoric if teachers lack deep knowledge of learners and wide-ranging pedagogical skills to help learners of diverse abilities. In the mainstream classroom, there is a need to help teachers better understand the nature and needs of able learners and to make needs-based curriculum decisions. This module aims to help student teachers obtain an overview of the conceptions of giftedness, understand the psychology and needs of the precocious student and develop appropriate, differentiated approaches to meet the learning needs of these students in mainstream classrooms.

### **QED582 Teaching Students with Behavioural and Learning Problems**

This module prepares future secondary school teachers in managing a classroom comprising students with diverse academic, emotional and behavioural challenges. The module emphasizes preventive, supportive and corrective measures for developing and maintaining positive learning environments for all students. Topics covered include causal and risk factors for learning and behavioural problems, an overview of academic, behavioural and social/emotional characteristics of students who manifest specific learning and behavioural problems, identification and assessment, effective academic instructional strategies, social skills instruction,

individual and group strategies for managing behaviours, and collaboration with parents.

## CURRICULUM STUDIES

### The Teaching of Biology

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCB520	Teaching of Biology I	Core	2	-
QCB521	Teaching of Biology II	Core	4	-
QCB522	Teaching of Biology III	Core	3	-

#### QCB520 Teaching of Biology I

The module consists of three parts:

Part 1: discusses some issues of the nature of science, and the use of history for teaching biology. It also introduces student teachers to biologists belonging to the minority groups.

Part 2: discusses alternative conceptions, difficulties and problems in various biology topics, and the use of concept maps for teaching biology.

Part 3: covers the various learning theories, styles and approaches, multiple intelligences theory, and the use of analogies and word juxtapoz for teaching biology.

#### QCB521 Teaching of Biology II

This module will examine the Biological Sciences curriculum in Singapore Schools and how to plan lessons for pupils of different ability ranges and levels in secondary schools. Basic teaching skills together with a variety of teaching/learning strategies, thinking/study skills and co-operative learning strategies will be discussed. The management and control of pupil behavior, safety practices in science. IT, its applications and resources for Biology teaching from the Internet, will be explored.

## **QCB522 Teaching of Biology III**

Issues on the what and why of testing in science, test construction, marking of examination scripts, and its implications for teachers and teaching styles. Alternative assessment of practical skills, the setting of tasks for Science Practical skills assessment, the rubrics for teachers' practical assessment and marking of practical work. The role of resource centres for field trips, planning and conducting field trips to suitable resource centre/nature reserve and the presentation of a report on the suitability of the centre. Issues and safety measures in conducting Life Sciences experiments for students in secondary schools. Reflections on Practicum.

## The Teaching of Chemistry

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCY520	The Teaching of Chemistry I	Core	4	-
QCY521	The Teaching of Chemistry II	Core	2	-
QCY522	The Teaching of Chemistry III	Core	3	-

### QCY520 The Teaching of Chemistry I

Basic issues, concepts and principles in chemical education. Psychological principles crucial to the teaching and learning of chemistry. Issues related to the organisation and implementation of the science/chemistry curriculum. The integration of IT and datalogging into the chemistry curriculum. The planning and teaching strategies, and use of resources crucial for the effective teaching of chemistry that includes unit and lesson planning, the inquiry approach, constructivist approach, problem-solving, expository teaching, demonstrations, project and practical work. The management of the chemistry laboratory and laboratory safety.

### QCY521 The Teaching of Chemistry II

Purposes of evaluation, tables of specifications, test construction, administration, marking, and analysis; interpretation of test scores. Alternative assessment modes such as open-book tests, take-home examinations, concept mapping, assessment of attitudes and values, and project work will be considered. The management, assessment and moderation of SPA (school-based practical assessment).

## **QCY522 The Teaching of Chemistry III**

Micro-teaching provides opportunities to identify and practise basic teaching skills such as opening and closing a lesson, explaining concepts, questioning and responding to pupils. Student teachers practise the relevant skills through mini-presentations on selected chemistry topics at the secondary level. The presentations are reviewed and critiqued by peers and the tutor.

## The Teaching of Chinese Language

Student teachers in the **PGDE programme specialising in Teaching of Chinese Language at the Secondary Level** are required to take the module on Chinese Language Acquisition and Related Issues in the APDCLL programme, and depending on whether they have offered similar modules for their first degree, they may be required also to offer one to two of the following two modules (a) Chinese Lexicology and Rhetoric, and (b) Modern Chinese Grammar.

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCC520	Teaching of Chinese Language 1	Core	3	-
QCC521	Teaching of Chinese Language 2	Core	5	-
QCC522	Teaching of Chinese Language 3	Core	2	-

### QCC520 Teaching of Chinese Language 1

This module aims to provide student teachers with the basic theories and concepts related to language and language teaching at secondary level, with special reference to Chinese. Its objective is to enable student teachers to design their own lesson plans with confidence, emboldened by sound theoretic knowledge.

### QCC521 Teaching of Chinese Language 2

This module aims to equip student teachers with techniques in the teaching of different language skills. Student teachers will acquire a comprehensive understanding of the various teaching methods and various practical techniques.

### **QCC522 Teaching of Chinese Language 3**

Student teachers will be introduced to basic concepts of Chinese language testing, the procedures of language testing, the effective ways of setting various types of questions and the cognitive levels involved.

## The Teaching of Chinese Literature

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCJ520	Teaching of Chinese Literature 1	Core	2	-
QCJ521	Teaching of Chinese Literature 2	Core	4	-
QCJ522	Teaching of Chinese Literature 3: IT and Project Work	Core	2	-

### QCJ520 Teaching of Chinese Literature 1

The module introduces student teachers to the Chinese literature syllabus for Singapore secondary schools. The module will also introduce various literary theories and discuss their implications in the teaching of Chinese literature. Student teachers will also be equipped with basic knowledge about major elements of Chinese literature, as well as the aims and objectives of teaching of Chinese literature. The objective is to equip student teachers with the knowledge and skills in the teaching of Chinese literature.

### QCJ521 Teaching of Chinese Literature 2

The module deals with the formal, stylistic and thematic features of various literary genres and the skills of teaching of different literary Chinese genres, both classical and modern. It also deals with the infusing of thinking skills in teaching Chinese literature.

### QCJ522 Teaching of Chinese Literature 3: IT and Project Work

This module provides the fundamental principles and knowledge on the use of IT in the studying and teaching of Chinese Language and Literature. It

equips student teachers with basic skills and approaches in searching, selecting and integrating of digital resources in the teaching of Chinese language and literature. It also introduces to student teachers the aims and objectives as well as fundamental concepts and strategies in supervising group projects in secondary school.

## The Teaching of Computer Applications

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCQ520	Topics in Computer Applications	Core	4	-
QCQ521	Computer Laboratories and Resources	Core	1	-
QCQ522	Assessment and Coursework	Core	2	-
QCQ523	Instructional Approaches to Computer Applications	Core	2	-

### QCQ520 Topics in Computer Applications

The various topics in the syllabus with reference to key concepts and developments of subject topics including computer basics, word processing, desktop publishing, spreadsheets, database management, computer graphics, multimedia presentation and computers in everyday life. Activities and instructional materials relevant to each area. The opportunity to practise teaching skills. Tutor and fellow student teachers give feedback and suggestions on various aspects of teaching competencies for reflection and further practice.

### QCQ521 Computer Laboratories and Resources

Computer facilities including hardware and software, computer systems and installation, computer laboratory, microcomputers, networks, peripherals, costing; sources of information about computing and computer education including resource centres, publications, instructional packages.

### QCQ522 Assessment and Coursework

The design, construction and analysis of tests, examinations and coursework; assessment for diagnosis and remediation; requirements and

standard of performance expected of pupils in preparation for examinations.

### **QCQ523 Instructional Approaches to Computer Applications**

The computer applications syllabus as prescribed in the Normal (Technical) course and the planning of lessons. Aims of computer education for schools, the rationale and objectives of the syllabus, conceptual framework, organisation and sequencing, nature and principles of computing, lesson plan and preparation. The various instructional approaches appropriate for the teaching of computing, such as exposition, investigation, discussion, problem solving, hands-on activities and cooperative groupwork. The opportunity to practise teaching skills. Discussions on how emerging technologies can be used in the teaching process.

## The Teaching of Elements of Office Administration

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QOA520	Teaching Office Administration to 'N' Pupils	Core	5	-
QOA521	Assessment and Further Strategies in Teaching Office Administration	Core	4	-

### QOA520 Teaching Office Administration to 'N' Pupils

This module introduces student teachers to the rationale and structure of Elements of Office Administration in the school curriculum. After having an overview of syllabus development and MOE initiatives, the student teachers are exposed to a variety of strategies and resources for teaching and learning of EOA through experiential learning. These include cooperative learning, peer tutoring, learning through field trips, and problem-based learning. Theoretical underpinnings of certain best practices using frameworks like Dimensions of Learning, learning styles and brain-based learning in teaching normal course pupils will be shared. There will be opportunities for hands-on practice, role-play, group simulation games, cooperative learning, peer evaluation & feedback in lesson planning and micro-teaching of selected topics in the EOA syllabus, with peer feedback and self-reflection. Such experiential learning prepares student teachers for effective teaching and learning of EOA. Classroom management is discussed too. Ample opportunities in harnessing IT and embedding alternative assessments in the teaching and learning of EOA to enhance the effectiveness of the teaching-learning process will be provided. Emphasis is given to building a student-centred environment to enhance the teaching and learning of EOA. A mixed mode delivery approach is used to cater to the student teachers' needs and to expose them to a repertoire of

strategies and methods for teaching and learning in an outcomes-focused, technology rich environment. Student teachers will be engaged in reflective practice.

### **QOA521 Assessment and Further Strategies in Teaching Office Administration**

There are two parts to this module: (a) Modes of assessment and examination requirements for EOA, which includes discussion of assessment issues related to the examiners' expectations and the crafting of examination questions and marking schemes. (b) Further instructional approaches, which will extend discussion to the development of learning communities, inquiry and the use of IT. The focus will be on strategies and techniques that are specially catered to the teaching of computing to the less academically inclined pupils, which include classroom management in the computer laboratory and standard operating procedures to be adhered to, are discussed. There will be opportunities for student teachers to have hands-on practice on computers as well as microteaching sessions to develop skills in teaching computing aspects as well as the other requirements of the syllabus to EOA pupils.

## The Teaching of English Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCE520	Language Teaching Approaches	Core	6	-
QCE521	Language Teaching Experience	Core	3	-

### QCE520 Language Teaching Approaches

This module introduces learner teachers to the theory and practice of teaching grammar, oral communication, reading and writing to secondary school students. Using the *English Language Syllabus 2001* as a point of departure, it aims to help learner teachers explore a range of strategies and skills for developing language proficiency in students, and develop lesson outlines for teaching grammar and the language skills in integrated ways. Learner teachers will become familiar with the theoretical perspectives, approaches and principles that underpin language teaching and learning. They will also develop an ability to select, adapt, and use a variety of resources for language teaching and modes of assessment of learning. By encouraging a critical, integrated and balanced view of theory and practice, this module aims to develop informed, reflective and effective beginning teachers of English Language at the secondary school level.

### QCE521 Language Teaching Experience

This two-part module aims to help learner teachers cultivate an ability to reflect on their language teaching practices and experiences and make stronger links between theory and practice in language teaching. The first part is designed to provide an opportunity for learner teachers to put into practice the understandings and skills they have acquired from QCE520. Learner teachers will

collaboratively design and teach a unit of integrated lessons to secondary school students. Their tutors will guide them through the processes of planning, executing and reflecting on their teaching practice. The second part of the module is aimed at providing a forum for learner teachers to reflect on and share their teaching experiences gained during Practicum. The central theme running through both parts of the module will be Engaging our Learners, which is a principal thrust of the next phase of education (MOE Work Plan Seminar 2005).

## The Teaching of English Literature

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCR520	Aims and Approaches to Teaching Literature	Core	6	-
QCR521	Assessment and Writing About Literature	Core	2	-
QCR522	Post-TP Reflection on Literature Teaching	Core	1	-

### **QCR520 Aims and Approaches to Teaching Literature**

This module deals with the aims and objectives of teaching Literature in the local context. The main focus will be practical competence in teaching the major literary forms—poetry, prose fiction, and drama, and practice in lesson planning and literature teaching skills.

### **QCR521 Assessment and Writing About Literature**

This module examines the principles and practice of Literature assessment with a view towards improving the setting of Literature tests and exams. Strategies and tasks for the development of writing skills will also be a focus.

## **QCR522 Post-TP Reflection on Literature Teaching**

This module allows for student teacher self-reflection and evaluation after student teachers' experience of teaching practice. It will focus on helping student teachers develop self-reflexive habits and on improving teaching strategies. Questions and areas of weakness arising from TP will be addressed.

## The Teaching of Geography

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCG520	Classroom and Field Approaches to the Teaching and Assessment of Geography	Core	6	-
#QCG521	Teaching Social Studies to Secondary School Students	Core	3	-
*QCG522	Themes in Secondary Social Studies	Core	3	-

Note: \* For those offering CS Geography and CS History  
# For those offering CS Geography and another CS other than History

### **QCG520 Classroom and Field Approaches to the Teaching and Assessment of Geography**

This module introduces student teachers to a variety of teaching methods applicable to pupils of differing academic abilities in classroom situations and field settings. As a subject, geography permits the use of a large variety of instructional resources. As such, the module will integrate the use of a range of resources to enhance teaching and learning.

The module also provides opportunities to try out teaching methods through simulated teaching. Student teachers will be given opportunities to plan, teach and critique a lesson in geography under simulated conditions.

Student teachers will also be introduced to the fundamentals of assessment in geography. A variety of assessment methods will be discussed. Student teachers will be given opportunities to critique set examination papers and mark schemes, and to mark sample answer scripts.

## **QCG521 Teaching Social Studies to Secondary School Students**

This module aims to provide student teachers with an understanding of the nature, scope and goals of social studies education in Singapore. The module will provide opportunities for student teachers to reflect on issues related to the secondary social studies syllabus content, and acquire an understanding of these issues. It also seeks to equip student teachers with a variety of classroom-based teaching strategies that are appropriate for the teaching of concepts, content, skills and values to differentiated learners in the social studies classroom. Student teachers will be exposed to these strategies through experiential learning. The tutorials will also provide opportunities for student teachers to reflect on critical issues in social studies teaching, discuss and practise some of teaching strategies, and design and develop unit and lesson plans in a cooperative learning environment. Student teachers will have opportunities to set source-based questions and structured-essay questions, devise the marking schemes and mark answer scripts.

## **QCG522 Themes in Secondary Social Studies**

This module is for student teachers offering both History and Geography as their Curriculum Studies subjects. Student teachers take this module in place of the module “Teaching Social Studies to Secondary School Students”.

This module allows student teachers to prepare a formal academic paper, in any area related to the social studies content and pedagogy. Such tasks may vary widely, from a report on fieldwork or classroom research, through the interpretation of an oral history account or original sources, to a detailed secondary literature review on a well-defined issue or topic.

## The Teaching of History

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCH520	Teaching and Learning of Secondary History and Social Studies Through Field Trips	Core	2	-
QCH521	Teaching and Learning of Secondary History and Social Studies	Core	4	-
QCH522	Assessment and Evaluation in Secondary History and Social Studies	Core	2	-
QCH523	Reflection on the Teaching and Learning of Secondary History and Social Studies	Core	1	-

### **QCH520 Teaching and Learning of Secondary History and Social Studies through Field Trips**

This module seeks to expose student teachers to an interesting and challenging strategy in the teaching of History and Social Studies by taking student teachers out of the classroom. It will focus on how fieldtrips can be used to make the subjects come alive for pupils. Student teachers will be trained to plan, organise and conduct fieldtrips to selected sites in Singapore. They will not only discover valuable nuggets of information about these sites, but will also learn how to organise activities that will enhance pupils' awareness of their culture and heritage.

### **QCH521 Teaching and Learning of Secondary History and Social Studies**

The module gives an insight to student teachers about the nature and purpose of History and Social Studies. The teaching of History and Social Studies in secondary schools is now in an exciting phase of change. Critical thinking, ICT and use of sources are changing the way History and Social Studies are being taught. This module is designed to equip student teachers with various strategies such as

cooperative learning, the use of role-play, integrating sources in lessons and the use of information communication technology.

### **QCH522 Assessment and Evaluation in Secondary History and Social Studies**

This module enables student teachers to conduct assessment in History and Social Studies. To meet the objectives and examination requirements of the new syllabus, emphasis is given to the use of source materials. It examines how primary and secondary sources can be used in constructing document-based items. The module gives student teachers practice in setting source based and structured essay questions, devising marking schemes and marking answer scripts. It also introduces student teachers to formative assessments.

### **QCH523 Reflection on the Teaching and Learning of Secondary History and Social Studies**

This module gives student teachers the opportunity to link theory with practice. It emphasizes the importance of reflection in teaching. Student teachers will be given the opportunity to share their reflection on a particular lesson that they have been tasked to teach in the school they have been posted to. They will also reflect on their Practicum.

## The Teaching of Mathematics

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCM520	Teaching and Learning Mathematics I (All Sec)	Core	6	-
QCM521	Teaching and Learning Mathematics II (All Sec)	Core	3	-

### QCM520 Teaching and Learning Mathematics I (All Sec)

The main objective of this course is to equip student teachers with a working knowledge of basic teaching principles; an understanding of the theories of learning that inform instruction and a comprehensive knowledge of the curriculum. The content of this module includes: aims and objectives of mathematics education; mathematics curriculum in Singapore; learning theories in mathematics; lesson planning; role of ICT in mathematics education; teaching of mathematics topics - Arithmetic, Algebra, Functions and Graphs, Mensuration, Geometry, Trigonometry, Statistics, Probability, Sets, Matrices, Vectors, Higher Algebra and Calculus.

### QCM521 Teaching and Learning Mathematics II (All Sec)

Microteaching; assessment, test construction and marking; reflection on practice. Topics for microteaching and test construction will be taken from the Secondary Mathematics Syllabus.

## The Teaching of Lower Secondary Mathematics

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCM530	Teaching and Learning Mathematics I (Lower Sec)	Core	6	-
QCM531	Teaching and Learning Mathematics II (Lower Sec)	Core	3	-

### QCM530 Teaching and Learning Mathematics I (Lower Sec)

The main objective of this course is to equip student teachers with a working knowledge of basic teaching principles; an understanding of the theories of learning that inform instruction and a comprehensive knowledge of the curriculum. The content of this module includes: aims and objectives of mathematics education; mathematics curriculum in Singapore; learning theories in mathematics; lesson planning; role of ICT in mathematics education; teaching of mathematics topics - Arithmetic, Algebra, Functions and Graphs, Mensuration, Geometry, Trigonometry, Statistics, Probability, and Sets.

### QCM531 Teaching and Learning Mathematics II (Lower Sec)

Microteaching; assessment, test construction and marking; reflection on practice. Topics for microteaching and test construction will be taken from the Lower Secondary Mathematics Syllabus.

## The Teaching of Physics

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QCP520	Teaching of Physics I	Core	2	-
QCP521	Teaching of Physics II	Core	4	-
QCP522	Teaching of Physics III	Core	3	-

### QCP520 Teaching of Physics I

The module attempts to provide student teachers in initial teacher education programmes with an understanding of school pupils they will be taking charge of. To improve their teaching efforts, they will be exposed to individual differences in learning, diagnosis, and strategies to deal with different ability groups as represented in the Gifted, Express, Normal (Academic) and Normal (Technical) Streams. Special effort will be devoted to helping the student teacher deal with critical incidents. Lectures on showmanship, creativity, thinking skills, inquiry, telling and explaining will be included as the key elements in support of good teaching.

### QCP521 Teaching of Physics II

This module will introduce student teachers to physics curriculum development with respect to international and local trends. The infusion of thinking, the meaningful integration of ICT and the linkage to national education, innovation and enterprise spirit will be given due attention and focus. An understanding of the constructivist-inquiry approach, investigative problem-solving, meaningful demonstration and purposeful deductive inquiry will facilitate the teaching and learning of physics. This module will also address alternative conceptions of student teachers on various physics topics. Activities based on the physics curriculum and involving

experiences that are hands-on, minds-on and experiential will be introduced to model how conceptual development and change can be facilitated.

### **QCP522 Teaching of Physics III**

This module covers important areas of Physics teaching pertaining to assessment and evaluation issues. It also deals with resource management, particularly with reference to laboratory work in the context of SPA. Safety in science laboratories, the role of practical work and the enhancement of science process skills are discussed. The setting of physics tests, marking and analyzing of test papers are covered with an emphasis on how to give useful feedback to students, parents and other stakeholders.

## PRACTICUM

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QPR520	Teaching Practice	Core	10	-

### QPR520 Teaching Practice

The Practicum is a very important component of the PGDE programme. Its principal function is to provide student teachers with the opportunity to develop teaching competencies in a variety of instructional contexts and at different levels, under the guidance and supervision of cooperating teachers and university lecturers. They will learn from experienced cooperating teachers about the schooling process and prepare themselves for their roles and responsibilities in teaching.

During the Practicum, student teachers will be able to use the knowledge and skills acquired in the subjects they read at the university, and have opportunities to integrate theory and practice in schools.

The Practicum will comprise a 10-week Teaching Practice (TP). During this period, the student teachers will build up their skills and knowledge in a step-wise manner. In addition, to ensure that the student teachers have a holistic experience, they will also be provided opportunities to explore other aspects of a teacher's life besides classroom teaching, for e.g., observing how CCAs are managed.

## LANGUAGE ENHANCEMENT AND ACADEMIC DISCOURSE SKILLS

### Communication Skills for Teachers

Module Code	Title	Module Category	No. of AUs	Pre-requisites
QLK520	Communication Skills for Teachers	Core	2	-

### QLK520 Communication Skills for Teachers

This is a practical course designed to provide the student teachers with oral and written skills necessary for effective communication as teachers in the classroom and in their professional interaction with colleagues, parents and the general public. It includes practice tasks to improve speaking skills as well as exercises and group work practice in thinking processes and communication strategies in the context of text types. Student teachers will be given practical instruction on vocal health care and vocal quality. The practice of good voice production will be embedded in the activities of every session.

## Use of Chinese in Teaching

Module Code	Title	Module Category	No. of Aus	Pre-requisites
QLC520	Use of Chinese in Teaching	Core	2	-

### QLC520 Use of Chinese in Teaching

This module provides the fundamental principles and knowledge on the use of Chinese in teaching. It also aims to equip student teachers with essential communication skills in Mandarin and IT power tools to improve themselves in order to achieve the goals in their professional development.