



**NIE**  
NATIONAL  
INSTITUTE OF  
EDUCATION

# POSTGRADUATE DIPLOMA IN EDUCATION

2002 – 2003

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ISSN 0218-3196

April 2002

**WITH THE COMPLIMENTS OF  
NATIONAL INSTITUTE OF EDUCATION  
NANYANG TECHNOLOGICAL UNIVERSITY  
REPUBLIC OF SINGAPORE**

## **ENQUIRIES**

All enquiries on admission to programmes offered by NIE are to be directed to:

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or visit the NIE homepage at:

*<http://www.nie.edu.sg>*

Because of the large number of candidates seeking admission, it is regretted that no telephone or personal enquiries will be entertained.

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*The information in this handbook is based on information available at the time of publication. The Institute reserves the right to make alterations without notice.*

## GENERAL INFORMATION

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## INTRODUCTION

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The National Institute of Education offers a postgraduate teacher-training programme leading to the award of the Postgraduate Diploma in Education (PGDE) of the Nanyang Technological University. The programme provides for some degree of specialisation in primary school and secondary school teaching and in the teaching of Physical Education (PE) in primary schools, secondary schools and junior colleges. The PE specialisations are taught in a two-year full-time programme. The rest are taught in a one-year full-time programme.

### **Aims of PGDE Programme**

The programme seeks to train university graduates to become teachers in primary or secondary schools. It aims to prepare teachers who are well-informed, competent and thinking professionals. Such teachers will have an understanding of the key concepts and principles of teaching and learning and should be able to implement, analyse and theorise about key instructional processes. They will be able to discharge competently their teaching responsibilities in a variety of classroom and school contexts in a professional and committed manner. They will also be committed to continual improvement and lifelong learning. Those specialising in Physical Education will be provided with an in-depth understanding of the scientific, psychological, sociological and philosophical principles which form the basis of Physical Education.

The PGDE programme is designed to prepare trainee teachers to:

- (a) have the knowledge and skills to teach two or three primary school subjects or two secondary school

subjects or Physical Education and one other subject, depending on the specialisation;

- (b) be aware of and sensitive to the needs, abilities, interests and aptitudes of school children, be they pupils in primary schools (for those specialising in primary school teaching) or students in secondary schools, junior colleges or centralised institutes (for those specialising in secondary school teaching);
- (c) be able to teach pupils of different abilities, interests and backgrounds effectively and creatively;
- (d) be committed to the nurturing and development of the pupils and students in their charge; and
- (e) be committed to self-initiated and sustained professional development.

### **Duration of Programme**

The PGDE programme is of one academic year's duration (an academic year consists of two semesters). It leads to the award of the Postgraduate Diploma in Education, with specialisations in primary education or secondary education. Students specialising in Primary/Secondary Education are further sub-divided into two categories: "General" and "Language Specialisation".

The PGDE (PE) programme is of two academic years' duration. It leads to the award of the Postgraduate Diploma in Education with specialisation in Physical Education at the Primary/Secondary level.

## **The Academic Unit System**

The Institute adopts the Academic Unit System, that is, academic units are used to measure academic workload per semester and per academic year. The academic year is currently divided into two semesters.

The Academic Unit (AU) provides a consistent measure of the trainee teacher's academic workload related to both class attendance and independent preparation. Used to weight modules in a subject taught for the duration of one semester of 13 teaching weeks, each Academic Unit represents an average workload of one hour per week in the form of lecture/tutorial classes, or three hours per week in the form of laboratory/field sessions. For example, a typical subject with one lecture hour per week and one tutorial hour per week carries 2 AUs. Academic Units are calculated on a modular basis, that is, subjects are made up of modules and each module carries a certain number of AUs.

## Academic Calendar

The academic year is made up of two semesters as follows:

Programme/Course	Dates of Semester Recess (R) / Vacation (V)	Dates of Written Examination	Dates of Practicum
PGDE (P & S) PGDE (PE) (Yr 2)	15 Jul 2002 - 9 Nov 2002 R: 1 Sep 2002 - 8 Sep 2002 V: 10 Nov 2002 - 5 Jan 2003  6 Jan 2003 - 24 May 2003 R: 16 Mar 2003 - 23 Mar 2003	24 Oct 2002 - 9 Nov 2002 (PGDE (PE) Yr 2 only)  (Compulsory Enrichment Programmes will be held from 4 May to 24 May 2003)	9 Sep 2002 – 13 Sep 2002 [School Experience for PGDE P & S Jul 2002 intake]  *24 Feb 2003 – 2 May 2003 [Practicum for PGDE P & S Jul 2002 intake & PGDE (PE) Year 2 Jul 2001 intake]
PGDE (PE) (Yr 1)	15 Jul 2002 - 9 Nov 2002 R: 1 Sep 2002 - 8 Sep 2002 V: 10 Nov 2002 - 5 Jan 2003  6 Jan 2003 - 3 May 2003 R: 23 Feb 2003 - 2 Mar 2003 V: 4 May 2003 - 20 Jul 2003	24 Oct 2002 - 9 Nov 2002  18 Apr 2003 - 3 May 2003	Nil  Nil

\*Recess falling within the Practicum period will follow the schools' one-week break in March

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## APPLICATIONS

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Application for admission to the Postgraduate Diploma in Education may be made online through the Ministry of Education website at <http://www.moe.edu.sg/teach>. The programme commences in July each year. Although applications are accepted throughout the year, it is advisable to submit applications by March to be considered for admission in July of the same year.

### **Entry Requirements for the PGDE Programme**

To be considered for admission, applicants should have at least a degree from the Nanyang Technological University, the National University of Singapore or other universities whose degrees are acceptable to the education service of Singapore.

For specialising in teaching Design and Technology at secondary school level, the degree must be in Mechanical Engineering, Chemical Engineering, Electrical Engineering or Civil Engineering.

For specialising in teaching general subjects at primary school level, graduate applicants must possess GCE 'O' level passes in English, Mathematics and any Science subject.

For specialising in teaching Physical Education, applicants will need to demonstrate an interest and ability in Physical Education and sports as well as undergo a physical proficiency test.

For specialising in teaching Music at secondary school level, applicants who are shortlisted will be required to give a five-minute audition prior to the interview. The audition will include at least one of the following: performance of prepared pieces on first and/or second instruments; sight reading on first instrument; sight singing; harmonising a simple melody on piano; or improvising a simple piece.

Applicants may be required to sit for the Entrance Proficiency Test and other tests.

NO TRAINEE TEACHER MAY PURSUE CONCURRENTLY ANY COURSE OF STUDY AT ANOTHER INSTITUTION OF LEARNING WHEN ENROLLED AS A FULL-TIME TRAINEE TEACHER AT THIS INSTITUTE.

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## **EXAMINATIONS, ASSESSMENT OF COURSEWORK & PRACTICUM**

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Different modes of assessment have been built into the coursework. These include tests/practical tests, assignments, project work, progress ratings and examinations. Examinations will be held at the end of each semester. There are no supplementary examinations. Clause 6(a) of the Examination Statute empowers the Dean to exclude a candidate from a university examination if he/she has not attended the course leading to the examination to the Dean's satisfaction. No special examination will be held for trainee teachers who are not able to take any paper because of illness or other special reason. They will be allowed to take the examination only on the next occasion when it is conducted.

Trainee teachers must complete satisfactorily all the modules they are required to take before qualifying for the award of the Postgraduate Diploma in Education (Primary/Secondary). Trainee teachers are responsible for ensuring that they register for all the modules and examinations necessary to fulfil the requirements of their course of study. Under normal circumstances, no candidate will be permitted to take more than two years or, in the case of a candidate specialising in Physical Education, more than three years, to complete the programme of study and pass the examination for the Postgraduate Diploma in Education.

## **Grading System**

Except for the Practicum, the following grading system is adopted:

A	-	Excellent
B	-	Very Good
C	-	Good
D	-	Pass
E	-	Marginal Fail
F	-	Fail

For the Practicum, the following grading system is used:

Dist	-	Distinction
Cr	-	Credit
P	-	Pass
F	-	Fail

No academic unit is earned for grades 'E' or 'F'. A trainee teacher is not permitted to offer a module that has a pre-requisite unless he has obtained a minimum of grade 'E' in the pre-requisite module.

A trainee teacher who obtains 'E' or 'F' for any module that is a pre-requisite for a higher level module must repeat the failed module on the next occasion it is offered.

A trainee teacher who obtains 'E' for a module but passes the higher level module for which it is a pre-requisite, will not be allowed to proceed to the next higher level of the module until he passes the basic pre-requisite module.

Each module attempted will be awarded a grade and recorded in the transcript. The grades for all attempts will appear in the transcript.

## **Classification of Trainee Teachers**

PGDE trainee teachers specialising in the Teaching of Physical Education are classified as Year 1 and Year 2 candidates according to the number of academic units earned as shown below:

<b>Programme</b>	<b>Number of Academic Units Earned</b>	
	<b>Year 1</b>	<b>Year 2</b>
PGDE (PE)	0-20	21 and above

## **Academic Warning, Probation and Dismissal**

- (i) A trainee teacher will be given an academic warning if he obtains more than 40% but less than 50% of the total number of AUs he takes in a semester.
- (ii) A trainee teacher will be placed on academic probation if:
  - a) he fails to restore himself to good standing in the consecutive semester following the issue of an academic warning, or
  - b) he obtains less than 40% of the total number of AUs he takes in a semester.
- (iii) A trainee teacher will be refused re-admission to his course of study if he is placed on academic probation for two consecutive semesters and fails to restore himself to good standing in the following semester.
- (iv) To be restored to good standing, a trainee teacher on academic warning or probation must obtain at

least 50% of the total number of AUs he takes in the following semester.

(v) The rules on warning, probation and dismissal will also apply to a trainee teacher on leave of absence. The academic status of such a trainee teacher prior to his leave will be counted towards dismissal if he fails to restore himself to good standing when he resumes his study.

(vi) The processes are summarised in the table below:

<b>SEMESTER</b>	<b>% OF TOTAL AUs OFFERED</b>	<b>ACADEMIC STATUS</b>
Original semester	Between 40 and 49	Academic Warning
2nd consecutive semester	Less than 50	Academic Probation
3rd consecutive semester	Less than 50	Academic Probation
4th consecutive	Less than 50	Dismissal (Refused re-admission)
Original semester	Less than 40	Academic Probation
2nd consecutive semester	Less than 50	Academic Probation
3rd consecutive	Less than 50	Dismissal (Refused re-admission)

## **Talks, Seminars, Workshops and Other Activities**

During the period of training, trainee teachers are expected not only to study diligently but also to participate actively in talks, seminars, workshops and other activities organised for them, such as the National Education programme and the Induction Seminar. These activities form an integral part of the programme.

## ACADEMIC STRUCTURE OF PROGRAMME

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## STRUCTURE OF PGDE PROGRAMME

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### **Core Modules & Prescribed Electives**

The main areas of study for the PGDE programme are classified under core modules and prescribed electives:

*Core Modules* : Compulsory modules that must be passed to fulfil programme requirements;

*Prescribed Electives* : Electives that form a certain field of specialisation in a particular subject. They add to the depth and/or breadth of knowledge and skills to be acquired by trainee teachers.

Each module is assigned **academic units (AUs)**. Minimum AU requirements for completing the PGDE programme are shown in Table 1 below:

**Table 1 : A Summary of the Academic Unit Requirements for the PGDE Programme**

Programme	Specialisation Section	Year of Study	Core Subject, Prescribed Electives & Practicum	Total#
PGDE	Primary	1	30	30
	Teaching of CL/ML/TL at Primary Level	1	29	29
	Teaching of CL at Primary Level (for those who did not major in Chinese Language/Literature at university level)	1	45	45
	Secondary	1	26	26
	Teaching of CL/ML/TL at Secondary Level	1	28	28
	Teaching of Physical Education at Primary Level	1	28	49
		2	21	
Teaching of Physical Education at Secondary Level	1	28	50	
	2	22		

*#The number of AUs listed in the table gives the minimum number of AUs required for graduation in each programme. The actual number of AUs for graduation for each student depends on the subject combinations offered.*

## **Contents of Programme**

The contents of the Postgraduate Diploma in Education programme comprise four main areas of study:

- (a) Education Studies
- (b) Curriculum Studies
- (c) Practicum
- (d) Language Enrichment and Academic Discourse Skills (LEADS)

In addition, trainee teachers under the **PGDE programme specialising in Teaching of Chinese Language at Primary level** who did not major in Chinese Language/Literature at university level will have to offer an Academic Subject in Chinese Language and Literature.

Trainee teachers who specialise in the **Teaching of Physical Education** will be required to read a fifth area called Academic Subjects.

### **Education Studies**

This category of study is compulsory and should be taken by all trainee teachers.

### **Curriculum Studies**

Trainee teachers under the **PGDE programme specialising in Primary School Teaching** will have the following Curriculum Studies subjects:

CS1: The Teaching of English Language

CS2: The Teaching of Mathematics

In addition they can select one of the following subjects as their third Curriculum Studies subject:

- CS3: The Teaching of Art
- CS3: The Teaching of Music
- CS3: The Teaching of Social Studies
- CS3: The Teaching of Science

Trainee teachers under the **PGDE programme specialising in Teaching of Chinese, Malay or Tamil Language at the Primary level** will have the following Curriculum Studies subjects:

- CS1: The Teaching of Chinese/Malay/Tamil Language
- CS2: The Teaching of Moral Education (Chinese/Malay/Tamil)

Trainee teachers under the **PGDE programme specialising in Secondary School Teaching** will be assigned two Curriculum Studies subjects by the Ministry of Education (MOE).

Trainee teachers under the **PGDE programme specialising in Teaching of Chinese, Malay or Tamil Language at the Secondary level** will have the following Curriculum Studies subjects:

- CS1: The Teaching of Chinese/Malay/Tamil Language
- CS2: The Teaching of Chinese/Malay/Tamil Literature

Trainee teachers under the **PGDE programme specialising in Teaching of Physical Education** will take Curriculum Studies modules in Physical Education as their CS1 throughout the duration of the programme.

These modules cover the theoretical and practical aspects of the Physical Education curriculum and instruction.

In Year 2, trainee teachers specialising in PE at the primary level will take **either** The Teaching of English Language **or** The Teaching of Mathematics as their CS2. Trainee teachers specialising in PE at the secondary level will be assigned one Arts **or** Science Curriculum Studies subject as their CS2.

### **Academic Subjects**

Trainee teachers under the **PGDE programme specialising in Teaching of Chinese Language at the Primary level** who did not major in Chinese Language/Literature at university level will be required to offer another 16 AUs of enrichment modules in Chinese Language and Literature.

Trainee teachers who specialise in the Teaching of Physical Education will be required to read one Academic Subject which will be Physical Education.

### **Practicum**

This group of modules is compulsory and is to be taken by all trainee teachers.

### **Language Enrichment & Academic Discourse Skills (LEADS)**

This component is aimed at improving the use of oral and written language in teaching.

**PGDE PROGRAMME SPECIALISING IN PRIMARY  
SCHOOL TEACHING**

## CURRICULUM STRUCTURE

The curriculum structures for various specialisations of the PGDE (Primary) programme are shown in Tables 2, 3 and 4 below:

**Table 2 : Curriculum Structure of the PGDE (Primary) Programme**

Category/ Subject	Module Code	Title	No. of AUs
	PED503	Instructional Technology	2
	PED504	Social Context of Teaching and Learning	2
	PED505	The Psychology of Pupil Development and the Learning Process	2
	PED506	Teaching and Classroom Management	2
	PED521	Schooling in Meritocratic Societies	2
	PED522	Moral Education across the Curriculum	2
	PED523	A New Learning Paradigm for Schools: The Learning Organisation Approach	2
	PED524	Rebels with a Cause!	2
	PED525	Investing in Social Capital: Building Effective Relationships Educational Stakeholders	2
	PED530	Teacher as Researcher	2
	PED531	Assessment for Effective Learning	2
	PED532	Pupil Management in Primary Schools	2
	PED533	Helping Pupils with Special Educational Needs	2
	PED535	Message Design and Computer-based Instruction	2
	PED536	Strategies for Effective Thinking and Learning	2
	PED537	Understanding and Helping Pupils with High Intellectual Ability	2
	PED538	Making Learning Interesting	2
	PED539	Understanding Social Behaviour in School	2
	PED540	Developing Thinking Skills Through Instrumental Enrichment	2
	PED541	Assessment to Promote Thinking in Primary Schools	2
	PED542	What it Means to be a Teacher: Understanding the Practice of Teaching	2
	PED543	Developing Creativity in the Primary Classroom	2
	PED544	Strategies for Encouraging Problem-solving Talents in Lower Primary Children	2
	PED545	Developmental Perspectives on How Children Think and Learn	2

Category/ Subject	Module Code	Title	No. of AUs
	PED546	The Application of Developmental Psychology in Teaching and Learning	2
	PED547	Assessment of Higher Order Learning in Primary Schools	2
	PED548	Instructional Strategies and Learning Effectiveness	2
	PED549	Using the Project Approach with Primary School Children	2
	PED550	The Psychology of Learning and Memory	2
<b>English Language</b>	PCE501	Integrating the Primary Language Arts: Teaching Reading and Writing	5
	PCE502	Developing Literacy through the Creative Arts	2
<b>Mathematics</b>	PCM505	Principles and Practice of Primary Mathematics	3
	PCM506	Fostering Mathematical Thinking	3
	PCM507	Assessment in Mathematics	2
<b>Art</b>	PCA501	Art Education in the Primary School and Art Processes I	2
	PCA502	The Art Curriculum and Teaching Resources	2
	PCA503	Art Processes II	1
<b>Music</b>	PCI501	Classroom Skills for Music Teaching	3
	PCI502	Primary School Music Syllabus	2
<b>Social Studies</b>	PCL501	Planning and Teaching Social Studies in the Primary Schools	4
	PCL502	Teaching Social Studies through Fieldwork	1
<b>Science</b>	PCS501	Primary Science Curriculum Analysis and Instructional Strategies	3
	PCS502	Primary Science: Assessment and Resources	2
	PPR501 ❖	Practicum	0
<b>Use of English in Teaching</b>	PCU501 ☒	Use of English in Teaching	0

❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

☒ This module is offered on a Pass/Fail basis. The module must be passed in order to fulfil programme requirements.

**Table 3 : Curriculum Structure of the PGDE (Teaching of CL/ML/TL at Primary Level) Programme#**

**Note: # Trainee teachers under this programme who did not major in Chinese Language/Literature at university level are to refer to Table 4.**

Category/ Subject	Module Code	Title	No. of Aus
	PED503	Instructional Technology	2
	PED504	Social Context of Teaching and Learning	2
	PED505	The Psychology of Pupil Development and the Learning Process	2
	PED506	Teaching and Classroom Management	2
<b>EDUCATION</b>			
	PED521	Schooling in Meritocratic Societies	2
	PED522	Moral Education across the Curriculum	2
	PED523	A New Learning Paradigm for Schools: The Learning Organisation Approach	2
	PED524	Rebels with a Cause!	2
	PED525	Investing in Social Capital: Building Effective Relationships Educational Stakeholders	2
	PED530	Teacher as Researcher	2
	PED531	Assessment for Effective Learning	2
	PED532	Pupil Management in Primary Schools	2
	PED533	Helping Pupils with Special Educational Needs	2
	PED535	Message Design and Computer-based Instruction	2
	PED536	Strategies for Effective Thinking and Learning	2
	PED537	Understanding and Helping Pupils with High Intellectual Ability	2
	PED538	Making Learning Interesting	2
	PED539	Understanding Social Behaviour in School	2
	PED540	Developing Thinking Skills Through Instrumental Enrichment	2
	PED541	Assessment to Promote Thinking in Primary Schools	2
	PED542	What it Means to be a Teacher: Understanding the Practice of Teaching	2
	PED543	Developing Creativity in the Primary Classroom	2
	PED544	Strategies for Encouraging Problem-solving Talents in Lower Primary Children	2
	PED545	Developmental Perspectives on How Children Think and Learn	2
	PED546	The Application of Developmental Psychology in Teaching and Learning	2
	PED547	Assessment of Higher Order Learning in Primary Schools	2

cont'd

Category/ Subject	Module Code	Title	No. of AUs
	PED548	Instructional Strategies and Learning Effectiveness	2
	PED549	Using the Project Approach with Primary School Children	2
	PED550	The Psychology of Learning and Memory	2
Chinese Language	PCC501	Teaching of Chinese Language 1	3
	PCC502	Teaching of Chinese Language 2	3
	PCC503	Teaching of Chinese Language 3	3
	PCC504	Teaching of Chinese Language 4	2
	PCC505	Teaching of Chinese Language 5	2
Malay Language	PCD500	Teaching of Malay Language 1	3
	PCD501	Teaching of Malay Language 2	3
	PCD502	Teaching of Malay Language 3	3
	PCD503	Teaching of Malay Language 4	2
	PCD504	Teaching of Malay Language 5	2
Tamil Language	PCT501	Teaching of Tamil Language 1	3
	PCT502	Teaching of Tamil Language 2	3
	PCT503	Teaching of Tamil Language 3	3
	PCT504	Teaching of Tamil Language 4	2
	PCT505	Teaching of Tamil Language 5	2
Moral Education (Chinese)	PCZ501	Teaching of Moral Education 1 (Chinese)	3
	PCZ502	Teaching of Moral Education 2 (Chinese)	1
Moral Education (Malay)	PCZ503	Teaching of Moral Education 1 (Malay)	3
	PCZ504	Teaching of Moral Education 2 (Malay)	1
Moral Education (Tamil)	PCZ505	Teaching of Moral Education 1 (Tamil)	3
	PCZ506	Teaching of Moral Education 2 (Tamil)	1
	PPR501❖	Practicum	0
<b>DISCOURSE SKILLS (Select the name)</b>			
Use of Chinese in Teaching	PCU504	Use of Chinese in Teaching 1	1
	PCU505	Use of Chinese in Teaching 2	1
Use of Malay in Teaching	PCU506	Use of Malay in Teaching 1	1
	PCU507	Use of Malay in Teaching 2	1
Use of Tamil in Teaching	PCU508	Use of Tamil in Teaching 1	1
	PCU509	Use of Tamil in Teaching 2	1

❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

**Table 4: Curriculum Structure of the PGDE (Teaching of CL at Primary Level) Programme for graduates who did not major in Chinese Language/ Literature at university level**

Category/ Subject	Module Code	Title	No. of AUs
	PED503	Instructional Technology	2
	PED504	Social Context of Teaching and Learning	2
	PED505	The Psychology of Pupil Development and the Learning Process	2
	PED506	Teaching and Classroom Management	2
	PED521	Schooling in Meritocratic Societies	2
	PED522	Moral Education across the Curriculum	2
	PED523	A New Learning Paradigm for Schools: The Learning Organisation Approach	2
	PED524	Rebels with a Cause!	2
	PED525	Investing in Social Capital: Building Effective Relationships Educational Stakeholders	2
	PED530	Teacher as Researcher	2
	PED531	Assessment for Effective Learning	2
	PED532	Pupil Management in Primary Schools	2
	PED533	Helping Pupils with Special Educational Needs	2
	PED535	Message Design and Computer-based Instruction	2
	PED536	Strategies for Effective Thinking and Learning	2
	PED537	Understanding and Helping Pupils with High Intellectual Ability	2
	PED538	Making Learning Interesting	2
	PED539	Understanding Social Behaviour in School	2
	PED540	Developing Thinking Skills Through Instrumental Enrichment	2
	PED541	Assessment to Promote Thinking in Primary Schools	2
	PED542	What it Means to be a Teacher: Understanding the Practice of Teaching	2
	PED543	Developing Creativity in the Primary Classroom	2
	PED544	Strategies for Encouraging Problem-solving Talents in Lower Primary Children	2
	PED545	Developmental Perspectives on How Children Think and Learn	2
	PED546	The Application of Developmental Psychology in Teaching and Learning	2
	PED547	Assessment of Higher Order Learning in Primary Schools	2
	PED548	Instructional Strategies and Learning Effectiveness	2

'cont'd

Category/ Subject	Module Code	Title	No. of AUs
	PED549	Using the Project Approach with Primary School Children	2
	PED550	The Psychology of Learning and Memory	2
Chinese Language	PCC501	Teaching of Chinese Language 1	3
	PCC502	Teaching of Chinese Language 2	3
	PCC503	Teaching of Chinese Language 3	3
	PCC504	Teaching of Chinese Language 4	2
	PCC505	Teaching of Chinese Language 5	2
Moral Education (Chinese)	PCZ501	Teaching of Moral Education 1 (Chinese)	3
	PCZ502	Teaching of Moral Education 2 (Chinese)	1
Chinese Language & Literature	PAC501	Chinese Grammar	4
	PAC502	Chinese Rhetoric	2
	PAC503	Chinese Lexicology	2
	PAC504	Chinese Etymology	2
	PAC505	Critical Reading and Writing in Chinese I	3
	PAC506	Critical Reading and Writing in Chinese II	3
	PPR501 ♦	Practicum	0
Use of Chinese in Teaching	PCU504	Use of Chinese in Teaching 1	1
	PCU505	Use of Chinese in Teaching 2	1

- ♦ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

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## CONTENTS OF CORE MODULES AND PRESCRIBED ELECTIVES

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### EDUCATION STUDIES

Education Studies will acquaint trainee teachers with the key concepts and principles in education that are necessary for effective instruction and reflective practice in primary schools. The modules will deal with pupil development, the social context within which schooling operates, the application of psychology in teaching and learning, proactive approaches to develop creative and critical thinking skills and the use of instructional technologies in the classroom.

The component comprises two groups of modules namely *CORE MODULES* and *PRESCRIBED ELECTIVES*. The core modules are compulsory as they deal with basic educational concepts and principles. The prescribed electives allow choices which are intended to provide trainee teachers with an opportunity for in-depth and rigorous study of some significant areas in the field of education and to serve as a basis for the application of educational principles in a variety of instructional contexts.

## Education Studies

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PED503	Instructional Technology	Core	2	-
PED504	Social Context of Teaching and Learning	Core	2	-
PED505	The Psychology of Pupil Development and the Learning Process	Core	2	-
PED506	Teaching and Classroom Management	Core	2	-
PED521	Schooling in Meritocratic Societies	Prescribed	2	-
PED522	Moral Education across the Curriculum	Prescribed	2	-
PED523	A New Learning Paradigm for Schools: The Learning Organisation Approach	Prescribed	2	-
PED524	Rebels with a Cause!	Prescribed	2	-
PED525	Investing in Social Capital: Building Effective Relationships Educational Stakeholders	Prescribed	2	-
PED530	Teacher as Researcher	Prescribed	2	-
PED531	Assessment for Effective Learning	Prescribed	2	-
PED532	Pupil Management in Primary Schools	Prescribed	2	-
PED533	Helping Pupils with Special Educational Needs	Prescribed	2	-
PED535	Message Design and Computer-based Instruction	Prescribed	2	-
PED536	Strategies for Effective Thinking and Learning	Prescribed	2	-
PED537	Understanding and Helping Pupils with High Intellectual Ability	Prescribed	2	-
PED538	Making Learning Interesting	Prescribed	2	-
PED539	Understanding Social Behaviour in School	Prescribed	2	-
PED540	Developing Thinking Skills Through Instrumental Enrichment	Prescribed	2	-
PED541	Assessment to Promote Thinking in Primary Schools	Prescribed	2	-
PED542	What it Means to be a Teacher: Understanding the Practice of Teaching	Prescribed	2	-
PED543	Developing Creativity in the Primary Classroom	Prescribed	2	-
PED544	Strategies for Encouraging Problem-solving Talents in Lower Primary Children	Prescribed	2	-

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<b>Module Code</b>	<b>Title</b>	<b>Module Category</b>	<b>No. of AUs</b>	<b>Pre-requisites</b>
PED545	Developmental Perspectives on How Children Think and Learn	Prescribed	2	-
PED546	The Application of Developmental Psychology in Teaching and Learning	Prescribed	2	-
PED547	Assessment of Higher Order Learning in Primary Schools	Prescribed	2	-
PED548	Instructional Strategies and Learning Effectiveness	Prescribed	2	-
PED549	Using the Project Approach with Primary School Children	Prescribed	2	-
PED550	The Psychology of Learning and Memory	Prescribed	2	

### **PED503 Instructional Technology**

Learning, thinking, and the effective use of instructional technologies in the classroom; instructional planning models; selecting, creating, evaluating, and integrating instructional technologies and resource materials; promoting creativity and complex thinking through IT project work activities; organising and managing instructional activities with appropriate IT resources in the classroom.

### **PED504 Social Context of Teaching and Learning**

The historical development, structure and organisation of the Singapore education system; key education policies. Sociological perspectives on teaching, learning and socialisation: the school and society; home and school; effective school organisation; teaching as a profession. Philosophical perspectives on teaching and learning: the concept of education; moral education; authority, freedom and education.

## **PED505 The Psychology of Pupil Development and the Learning Process**

Understanding different aspects of child development and how these influence the teaching and learning processes. Physical changes in childhood, stages of moral development, psychosocial developmental tasks 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; remedial measures to help weaker pupils.

## **PED506 Teaching and Classroom Management**

Emphasis on the application of pedagogical knowledge and instructional skills for facilitating learning, the understanding of different models of classroom management and the role of classroom management in fostering academic achievement and appropriate pupil behaviour in different classroom settings, such as, computer and science laboratories, subject rooms, and the process of evaluating teaching-learning process. In addition, the importance of the practice of proactive classroom management and positive interpersonal teacher behaviour on classroom learning is stressed.

## **PED521 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.

## **PED522 Moral Education Across the Curriculum**

It has been often pointed out that every teacher is a moral educator. This module is an attempt to show why and how this saying is true. With the 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, and not only Civics and Moral Education 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 moral practice, no matter what subject they teach and what CCA they conduct.

## **PED523 A New Learning Paradigm for Schools: The Learning Organisation (LO) Approach**

Are we teaching what we ought to be teaching in the way that we ought to teach? Are our students learning what they ought to be learning in the way they ought to learn? How can teachers promote more effective and efficient learning through the practice of the five disciplines of the Learning Organisation (LO), namely, Personal Mastery, Mental Models, Shared Vision, Team Learning and Systems Thinking. This module is an introduction to how beginning teachers can acquire some of the skills and tools of learning organisations and how these can be employed for their classroom and school-wide interactions with other participants of the school organisation

## **PED524 Rebels with a Cause!**

This module examines a number of controversial rebel educators who rocked the boat of established educational ideas and practices throughout history. Examples of rebel philosophy include:

“Do not tell a child anything which he can learn for himself” (Rousseau).

“Education must harmonize with nature” (Pestalozzi).

“Replace authority in schools with freedom” (A.S. Neill).

“Children should be allowed to follow their own interests” (Bertrand Russell).

“Schools encourage children to act stupidly” (John Holt).

These controversial statements will be discussed in terms of their relevance to the prevailing socio-economic environment in Singapore today. Students enrolled in this module will be encouraged to reflect

on the material presented through lectures, tutorials, student seminar presentations, formal debates, films and informal discussions.

### **PED525 Investing in Social Capital: Building Effective Relationships with Educational Stakeholders**

This module explores the key concept of social capital and how school professionals can leverage on social capital to build positive school-community links with major educational stakeholders. It examines examples of cross-cultural research on the benefits of parental involvement in schooling and provides opportunities for basic research into parent-teacher relationships in Singapore and strategies for creative partnerships at primary and secondary levels of schooling.

### **PED 530 Teacher as Researcher**

Understanding children's socio-cultural contexts and implications for a permeable curriculum. The teacher as researcher and approaches to professional inquiry. Exploring appropriate teacher research methodologies: case study and action research. Understanding and using data collection tools: questionnaires, interest inventories, interviews, observations, portfolios, professional journal keeping. Interpreting the data, presenting research results, writing a research report. Planning, implementing and reporting on an action research project to be done during Practicum.

### **PED531 Assessment for Effective Learning**

Role of assessment in the learning process; assessment practices in Singapore schools; basic knowledge and practical skills of monitoring and assessing pupils' learning; essentials of measurement in the cognitive, affective and behavioural domains, the use and construction of classroom tests; item analysis and test reporting; basic statistics for educational measurement; use of computers in educational assessment; evaluation of teaching and learning.

### **PED532 Pupil Management in Primary Schools**

Principles and practice of Pastoral Care and Career Guidance and its introduction to Singapore schools; group dynamics in the classroom and techniques in developmental group guidance; social and psychosocial factors affecting the personal development and learning of pupils; assessment of guidance needs; the place of career education in primary schools; the helping process and basic counselling skills.

### **PED533 Helping Pupils with Special Educational Needs**

Issues and problems of pupils with special educational needs; low achievers; slow learners; underachievers; gifted and talented pupils; identification and diagnosis of needs; nature and nurture; causes; characteristics; differentiated curricula; types of educational programmes available; strategies and teaching approaches.

### **PED535 Message Design and Computer-based Instruction**

The application of effective instructional message design principles to design, develop and evaluate a small computer-based learning project. The use of a variety of software technologies, including appropriate authoring tools to create courseware materials for web-based delivery or for stand-alone use.

### **PED536 Strategies for Effective Thinking and Learning**

The place of thinking skills in teaching and learning; different types of thinking skills; role of the teacher in creating a learning environment conducive for thinking; relevant thinking programmes and their implications for classroom practice; teaching thinking skills to enhance learning; observing, monitoring and evaluating the development of thinking skills in the learner.

### **PED537 Understanding and Helping Pupils with High Intellectual Ability**

Definitions; issues and research; concept of "high intellectual potential"; identification and assessment procedures; nurturing of giftedness and talents; fostering the growth and development of high ability; special educational provisions in primary schools; the importance of the home and school in fostering the achievement of pupils' learning.

## **PED538 Making Learning Interesting**

Our aim as educators is to create an environment that supports students' intrinsic interest in learning and developing competencies. Nonetheless, it is unrealistic to expect students to exert effort voluntarily and enthusiastically on every school task, so some extrinsic support for learning is essential. As such, the aim of this course is to provide some ideas as to how beginning teachers can create a context in which students' intrinsic motivation can be maximised and in which extrinsic rewards for learning do not undermine their intrinsic interest and their sense of personal responsibility.

## **PED539 Understanding Social Behaviour in School**

An understanding of social behaviour in school and in the classroom. How teachers and students think about and interact with others; how students think about their own attitudes and behaviour and how these are influenced by situational and social factors. Specific topics include self-esteem, social identity, helping and aggressive behaviour, obedience & conformity, leadership, and intimate relationship.

### **PED540 Developing Thinking Skills Through Instrumental Enrichment**

A powerful thinking strategy developed by Reuven Feuerstein. The foundation of clear thinking and transfer of what pupils learn in the classroom to beyond. Practical tools and activities to develop the concept of mediated learning, strategies for overcoming cognitive difficulties and the creation of lifelong learners. Thinking strategies and skills, instruments and techniques, Instrumental Enrichment, the teacher as mediator and the cognitive map.

### **PED541 Assessment to Promote Thinking in Primary Schools**

Understanding and applying the basic principles in assessment to the classroom situation. Basic knowledge and practical skills to manage and monitor pupils' learning at the primary level. Covers alternative assessment to assess different thinking skills.

### **PED542 What it Means to be a Teacher: Understanding the Practice of Teaching**

Developing a more reasoned understanding of the nature of the practice of teaching; the uncertainties of teaching; teaching as transition of knowledge and skills and as transformation of character, values, understanding, and thinking; teaching as a moral (and intellectual) endeavour; teaching learning; selections from teacher autobiographies, teacher case studies, and scholastic writings on teaching.

### **PED543 Developing Creativity in the Primary 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.

### **PED544 Strategies for Encouraging Problem-solving Talents in Lower Primary Children**

The requisite knowledge, skills, and values to effectively maximise problem-solving potential in lower primary school children; how young children think and learn and how they make sense of their world; individual differences in children in terms of their developing problem-solving skills and abilities; the ability-driven curriculum and the development of talents and abilities; how to nurture young children's understanding, and self-motivation; teaching strategies to extend young children's natural curiosity, their enjoyment of discovering and inventing, and their pride in their achievements; a focus on child-centred activity in the lower primary classroom.

## **PED545 Developmental Perspectives on How Children Think and Learn**

The many images of childhood as presented by key developmental theorists and the new ideas, research and practical lessons for teachers that have emerged from recent research in the last decade; the central importance of understanding children's conceptual development if we are to help them think and learn; individual differences in children's achievements and experiences at school, and a focus on the implications for educational practice.

## **PED546 The Application of Developmental Psychology in Teaching and Learning**

How individuals develop and change through the life span; the fundamental concepts and characteristics of developmental psychology, basic theories of human development, research methods and recent findings related to human development; human development and individual differences; factors influencing development; cognitive development and relevant theories; personality development and relevant theories; social and moral development and relevant theories; implications of these theories for learning and teaching and their application in the classroom.

**PED547 Assessment of Higher Order Learning in Primary Schools**

Understanding and application of principles of assessment in the classroom; present and future developments in the field of assessment to promote thinking and higher-order learning; the knowledge and skills to develop suitable quality assessments for the different thinking skills; design of appropriate scoring rubrics for judging student performance; interpretation of assessment results for different purposes.

**PED548 Instructional Strategies and Learning Effectiveness**

Careful planning and implementation of instruction for effective learning; various instructional strategies such as whole-class teaching, small group instruction, group work, individual instruction, out-of-classroom instruction, games and simulation and their effective implementation for facilitating learning in the classroom; the importance of empowerment of students in learning and the teaching of thinking and learning strategies to students during the process of instruction.

**PED549 Using the Project Approach with Primary School Children**

The processes of project work: Planning the project, conducting fieldwork, documenting and representing information. The learning environment, role of the teacher and assessment. A project is included as part of the assessment.

## **PED550 The Psychology of Learning and Memory**

An introduction to learning and memory. It will examine how knowledge is acquired, stored, and retrieved. In addition, different ways in which learning and recollection can be maximised will be investigated. The lectures will give trainee teachers an overview of the pertinent issues. Using computerised experiment generators, debates and mini learning activities, the tutorials will give trainee teachers deeper insight on the phenomena examined in the lectures. At the end of the course, trainee teachers are expected to be able to discuss, evaluate, and apply findings from research on learning and memory.

## CURRICULUM STUDIES

The Curriculum Studies options are teaching subjects relevant to the needs of primary schools. The aim in teaching Curriculum Studies is to train the trainee teacher in the methods and techniques of teaching that subject at the primary school level.

### The Teaching of Art

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCA501	Art Education in the Primary School and Art Processes I	Core	2	-
PCA502	The Art Curriculum and Teaching Resources	Core	2	-
PCA503	Art Processes II	Core	1	-

#### **PCA501 Art Education in the Primary School and Art Processes I**

Introduction to the foundations of contemporary art education and to theories relating to the development of children's art. Art appreciation through critical studies as well as two-dimensional art activities that will increase students' own understanding of the creative thinking and practical processes appropriate to primary art teaching.

#### **PCA502 The Art Curriculum and Teaching Resources**

Introduction to the trends and developments in the Art Curriculum, incorporating MOE Curriculum initiatives such as National Education. The development and production of resources for primary art teaching. The planning, organisation and follow-up of an art visit.

## **PCA503 Art Processes II**

Exploratory experiences in a variety of three-dimensional art activities relevant to teaching and learning at the primary level.

## The Teaching of Chinese Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCC501	Teaching of Chinese Language 1	Core	3	-
PCC502	Teaching of Chinese Language 2	Core	3	-
PCC503	Teaching of Chinese Language 3	Core	3	-
PCC504	Teaching of Chinese Language 4	Core	2	-
PCC505	Teaching of Chinese Language 5	Core	2	-

### **PCC501 Teaching of Chinese Language 1**

The aims and objectives of teaching Chinese at the primary level. Theories of language learning and acquisition, the Chinese Language syllabus and the understanding of learner's background. The various approaches to the teaching of vocabulary and modern Chinese grammar. The objectives of teaching speaking and listening skills, the theoretical basis of audiolingual and communicative teaching methods and the use of the language laboratory and various approaches to the teaching of listening and speaking. Use of IT in the teaching of Chinese Language and application of thinking skills in the context of Chinese Language.

### **PCC502 Teaching of Chinese Language 2**

The objectives and theoretical foundations of teaching reading and writing. The development of reading and writing skills and the various approaches to the teaching of reading and writing.

### **PCC503 Teaching of Chinese Language 3**

The objectives and the various methods in the teaching of Chinese character writing skills. The objectives and various approaches in the teaching of recognition of Chinese characters. The various components as related to the recognition of Chinese characters.

### **PCC504 Teaching of Chinese Language 4**

The objectives and the various forms of Chinese language testing, the construction of test items and item analysis. The application of reliability, validity for the construction of Chinese language test items at primary level.

### **PCC505 Teaching of Chinese Language 5**

The objectives of teaching children's literature. The selection of suitable materials for reading and the planning of activities in the teaching of children's literature. Use of Internet resources and CD-ROM for teaching.

## The Teaching of English Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCE501	Integrating the Primary Language Arts: Teaching Reading and Writing	Core	5	-
PCE502	Developing Literacy Through the Creative Arts	Core	2	-

### **PCE501 Integrating the Primary Language Arts: Teaching Reading and Writing**

The teaching of the oral and written English language in the primary schools grounded in current theory, principles and approaches. Includes methods of integrating the four major language skills: listening, speaking, reading and writing with an emphasis on the development of critical thinking.

### **PCE502 Developing Literacy Through the Creative Arts**

Techniques for enriching pupils' language experiences in the Integrated Language Arts classroom. Pedagogical practices which encourage literacy development through creative activities and responses to children's literature. Includes use of IT resources.

## The Teaching of Malay Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCD500	Teaching of Malay Language 1	Core	3	-
PCD501	Teaching of Malay Language 2	Core	3	-
PCD502	Teaching of Malay Language 3	Core	3	-
PCD503	Teaching of Malay Language 4	Core	2	-
PCD504	Teaching of Malay Language 5	Core	2	-

### **PCD500 Teaching of Malay Language 1**

The theoretical and practical understanding for the Malay Language curriculum in primary schools. Theories and approaches in language acquisition and learning: the behaviouristic theory, etc, various language teaching and learning methods and techniques. The process of vocabulary acquisition and development, including teaching of Malay proverbs.

### **PCD501 Teaching of Malay Language 2**

Reading processes, the concept of reading "readiness" and the development of reading skills. Methods and strategies in the teaching of reading and reading comprehension including the use of big books in Malay. Reading activities and programmes at the primary level.

### **PCD502 Teaching of Malay Language 3**

Understanding of the writing process, the various types of writing, the levels of writing skills and the teaching evaluation of writing skills. Oral and speaking skills. The teaching of listening and speaking skills.

### **PCD503 Teaching of Malay Language 4**

The process of vocabulary acquisition and development, teaching and learning strategies including the teaching of Malay proverbs. The use of computer and IT-based materials in the teaching of Malay language. Teaching and learning of Malay grammar at primary level.

### **PCD504 Teaching of Malay Language 5**

Basic concepts of testing, the construction and administration of tests, item analysis and developing language tests in Malay. Testing language skills such as listening, speaking, reading and writing in Malay at the primary school level.

## The Teaching of Mathematics

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCM505	Principles and Practice of Primary Mathematics	Core	3	-
PCM506	Fostering Mathematical Thinking	Core	3	-
PCM507	Assessment in Mathematics	Core	2	-

### PCM505 Principles and Practice of Primary Mathematics

Overview of aims and philosophy of mathematics education. The Singapore Mathematics curriculum with special emphasis on the primary level. The approaches to teaching discussed are underpinned by psychological theories and pedagogical principles about the teaching and learning of mathematics in relation to primary school children. Basic mathematical skills (to include number sense, interpreting data, communicating, justifying and estimation) and strategies to enhance these skills. Concept formation, skill retention and reinforcement with respect to selected primary school mathematics topics (e.g. numeration, arithmetical operations, factors, multiples, fractions, ratio and proportion, percent) through the use of discourse, manipulatives (including the abacus) and technology (e.g. calculator and computer). Preparing lesson plans and schemes of work, selecting appropriate exercises from textbooks and other resources and using mental mathematics effectively.

## **PCM506 Fostering Mathematical Thinking**

Meaning of mathematical thinking. Routine and non-routine problems. Problem solving heuristics/strategies. Problem posing, problem solving and investigations. Mathematical modelling, communication and connections. Metacognition and affective factors in problem solving. Use of games, IT and worksheets. How to teach selected topics from the primary school Mathematics syllabus (e.g. geometric shapes, nets, symmetry, tessellation, length, perimeter, area, volume, time, graphs) so as to foster creativity and mathematical thinking.

## **PCM507 Assessment in Mathematics**

Overview of assessing, testing and evaluating. Traditional assessment modes [e.g. multiple choice questions (MCQ), using paper and pencil] and preparing a table of specifications and MCQ items. Alternative forms of assessment in mathematics (e.g. project work, portfolios, journals, performance assessment, and student-constructed questions). Rubric for scoring alternative forms of assessment (including holistic and analytic scoring). Group evaluation. Diagnosis (including error analysis) and remediation.

## **The Teaching of Moral Education (Chinese/Malay/Tamil)**

Trainee teachers doing Teaching of Chinese Language will do PCZ501/2. Trainee teachers doing Teaching of Malay Language will do PCZ503/4 while those doing Teaching of Tamil Language will do PCZ505/6.

<b>Module Code</b>	<b>Title</b>	<b>Module Category</b>	<b>No. of AUs</b>	<b>Pre-requisites</b>
PCZ501	Teaching of Moral Education 1 (Chinese)	Core	3	-
PCZ502	Teaching of Moral Education 2 (Chinese)	Core	1	-
PCZ503	Teaching of Moral Education 1 (Malay)	Core	3	-
PCZ504	Teaching of Moral Education 2 (Malay)	Core	1	-
PCZ505	Teaching of Moral Education 1 (Tamil)	Core	3	-
PCZ506	Teaching of Moral Education 2 (Tamil)	Core	1	-

### **PCZ501 Teaching of Moral Education 1 (Chinese)**

The historical background of moral education in Singapore schools. An overview of the primary school Good Citizen programme. The selection of relevant materials for the teaching of moral education. The various approaches to the teaching of moral education. Hands-on experience and the preparation of teaching plans. Use of IT in the teaching of Moral Education. Application of thinking skills in the context of Moral Education.

### **PCZ502 Teaching of Moral Education 2 (Chinese)**

Special emphasis on five core values and family values in the multicultural context of Singapore, cultural patterns and the religions and festivals of different races.

### **PCZ503 Teaching of Moral Education 1 (Malay)**

An introduction to the study of moral education. The aims of moral education and the four approaches, i.e. the cultural transmission approach, consideration approach, cognitive developmental approach and values clarification approach. The Singapore curriculum and its objectives.

### **PCZ504 Teaching of Moral Education 2 (Malay)**

An overview of the primary school Moral Education programme. The aims and objectives, the approaches, techniques and strategies and preparation of teaching plans. Hands-on experience and the preparation of specific lessons. The concepts and core values in moral education, core and the shared values across different cultures. The implementation of moral education in the school environment.

### **PCZ505 Teaching of Moral Education 1 (Tamil)**

Various approaches to the teaching of moral education and the question of core and shared values in Singapore. The Moral Education curriculum at the primary school level and the teaching of moral education through cultural transmission, cognitive development, consideration and values clarification, as well as the critique and evaluation of such approaches. The meaning of life and promotion of understanding and acceptance of different races in Singapore. The Singapore heritage, the Singapore Constitution and attempts to develop an understanding of the various races, cultures and religions in Singapore.

### **PCZ506 Teaching of Moral Education 2 (Tamil)**

The Good Citizen programme. Special emphasis on core values such as Love and Humanity, Filial Piety, Harmonious Family, Courtesy, Responsibility, Compassion and Loyalty. Hands-on experience and preparation of specific lessons.

## The Teaching of Music

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCI501	Classroom Skills for Music Teaching	Core	3	ABRSM Grade V
PCI502	Primary School Music Syllabus	Core	2	or equivalent

### **PCI501 Classroom Skills for Music Teaching**

Development of general musicianship skills towards analysing and diagnosing appropriate instructional goals, objectives, music teaching strategies and teaching materials for the primary schools. The Kodaly handsigns, rhythm names, keyboard skills, use of IT, basic recorder techniques and other relevant skills needed to teach primary school music in Singapore.

### **PCI502 Primary School Music Syllabus**

The Music syllabus in Singapore primary schools, and how this syllabus supports the different educational policies (e.g. National Education). The rationale, background and philosophy of the module, together with practical experience of the musical materials used in the course. Lesson planning, presentation and evaluation.

## The Teaching of Science

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCS501	Primary Science Curriculum Analysis and Instructional Strategies	Core	3	-
PCS502	Primary Science: Assessment and Resources	Core	2	-

### **PCS501 Primary Science Curriculum Analysis and Instructional Strategies**

Scientific inquiry as the base for teaching and learning primary science. The goals and objectives of the Primary Science curriculum; analysis of the syllabus, science textbooks, and other curricular materials. The principles and methods of teaching primary science: concept formation, the structure of knowledge and concept mapping, development and use of science process skills, inquiry learning approach, expository teaching, problem solving and investigative science activities, conditions necessary for class instruction and activities, and small group or individual methods of teaching.

## **PCS502 Primary Science: Assessment and Resources**

Non-formal and formal methods of assessment of pupil learning in primary science; construction and use of different modes of class assessment; the underlying concepts and principles of assessment; table of specification; multiple-choice questions and item analysis; assessment of science process skills in both written and practical tests; analysis of test results for evaluative and diagnostic purposes leading to making decisions about the effectiveness of science learning; use of IT, teaching aids and resources; the organisation and management of pupils in the use of the science activity corner and the science room or the science garden.

## The Teaching of Social Studies

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCL501	Planning and Teaching Social Studies in the Primary Schools	Core	4	-
PCL502	Teaching Social Studies through Fieldwork	Core	1	-

### **PCL501 Planning and Teaching Social Studies in the Primary Schools**

An understanding of primary social studies and the demands of the syllabus and basic content in terms of concepts and generalisations for effective implementation in primary schools in Singapore. The module will provide reflective and critical awareness of various pedagogical methods for pupil-centred activities in social studies classrooms and the development of teaching resources to support these activities. Infusion of thinking, information technology and national education will be highlighted. The link of social studies to other primary school subjects will be included in the context of inter-disciplinary project work. Formal and informal assessment such as assessment portfolios will also be discussed.

### **PCL502 Teaching Social Studies through Fieldwork**

Fieldwork/fieldtrips and other out-of-classroom activities will be discussed in the context of an inquiry framework in the learning of social studies. Trainee teachers will organise and carry out fieldtrips/fieldwork to selected places of historical and geographical interest in Singapore.

## The Teaching of Tamil Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCT501	Teaching of Tamil Language 1	Core	3	-
PCT502	Teaching of Tamil Language 2	Core	3	-
PCT503	Teaching of Tamil Language 3	Core	3	-
PCT504	Teaching of Tamil Language 4	Core	2	-
PCT505	Teaching of Tamil Language 5	Core	2	-

### PCT501 Teaching of Tamil Language 1

Part 1: The teaching of Tamil as a second language in primary schools. Current theories and principles underlying the teaching of Tamil. Various methods and techniques for the teaching of the four language skills, namely, listening, speaking, reading and writing. Current issues in language teaching such as the use of error analysis as an effective teaching tool in the classroom and the importance of extensive reading and writing.

Part 2: Preparation of the trainee teacher to teach listening and speaking skills at the primary level. The importance of listening and speaking skills in language teaching, various approaches to the teaching of acceptable pronunciation, stress and intonation and the use of the language laboratory to teach pronunciation and listening.

### **PCT502 Teaching of Tamil Language 2**

An introduction to the Tamil alphabet, methods of teaching silent reading and reading aloud, vocabulary building and extensive reading at second language level. Integration of thinking skills in teaching of reading.

### **PCT503 Teaching of Tamil Language 3**

The teaching of writing, spelling, dictation and composition. Various approaches to the teaching of writing the Tamil alphabet, types of composition, composition marking and spelling and dictation. The use of IT in teaching of Tamil language.

### **PCT504 Teaching of Tamil Language 4**

The teaching of Tamil grammar at the primary level. The place of grammar in the study of the second language, traditional grammar and modern grammar, functional grammar, error analysis and the development of grammatical and communicative competence.

### **PCT505 Teaching of Tamil Language 5**

The principles of testing in Tamil language and literature. The characteristics of good tests, tests used in the schools, the construction of classroom tests, the development of tables of specifications, the preparation of marking schemes and the interpretation of test scores. High and low order thinking skills in testing.

## ACADEMIC SUBJECT

### Chinese Language and Literature

Trainee teachers under the PGDE (Teaching of CL at Primary Level) programme who did not major in Chinese Language/Literature at university level are required to offer 16 AUs of enrichment modules in Chinese Language and Literature.

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PAC501	Chinese Grammar	Core	4	-
PAC502	Chinese Rhetoric	Core	2	-
PAC503	Chinese Lexicology	Core	2	-
PAC504	Chinese Etymology	Core	2	-
PAC505	Critical Reading and Writing in Chinese I	Core	3	-
PAC506	Critical Reading and Writing in Chinese II	Core	3	-

#### PAC501 Chinese Grammar

A description of the system of modern Chinese grammar. The structural properties and sentence patterns of Chinese in functional terms. The syntax of modern Chinese grammar and recent developments in modern Chinese grammar in China and their influence on the language. How to analyse various types of sentences in modern Chinese.

#### PAC502 Chinese Rhetoric

The study of modern Chinese rhetoric. Rhetoric in the various genres of Chinese writing and its functional application.

### **PAC503 Chinese Lexicology**

A general survey of Chinese vocabulary, word formation and sense relationship between words in Chinese lexicology. Semantic changes in words and the structure of Chinese idioms and proverbs.

### **PAC504 Chinese Etymology**

The various categories of Chinese characters, the analysis of the radicals of Chinese characters and the development of Chinese characters in Chinese etymology.

### **PAC505 Critical Reading and Writing in Chinese I**

Texts from various genres in Modern and Semi-Classical Chinese exploring the areas of literature, language, education, culture and society. Basic training in critical reading and creative writing in the language.

### **PAC506 Critical Reading and Writing in Chinese II**

Selected texts in both Modern and Classical Chinese for intensive reading and close analysis. Training in making literary judgement and developing writing skill.

## PRACTICUM

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PPR501❖	Practicum	Core	0	-

- ❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

### PPR501 Practicum

The Practicum is a very important part of the PGDE (Primary) programme. Its principal function is to provide the trainee teachers with the opportunity to use knowledge and skills introduced in the Education Studies and Curriculum Studies courses and attempt to integrate theory into practice, and to develop teaching competencies in a variety of instructional contexts, and at different levels through close developmental supervision. They will learn from experienced cooperating teachers about the schooling process, and prepare themselves for their roles and responsibilities in teaching.

The Practicum is spread throughout the entire course of study. For the first semester, the trainee teachers will enjoy some school experience in primary classes so that they can observe at first hand how teachers teach and students learn. During the second semester, trainee teachers will be sent out to schools for their teaching practice. They will be given the opportunity to teach their subjects of specialisation to students of different abilities at the upper and lower primary levels.

## LANGUAGE ENRICHMENT AND ACADEMIC DISCOURSE SKILLS

Trainee teachers doing Teaching of Chinese Language will do PCU504/5. Trainee teachers doing Teaching of Malay Language will do PCU506/7 while trainee teachers doing Teaching of Tamil Language will do PCU508/9.

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCU501☒	Use of English in Teaching	Core	0	-
PCU504	Use of Chinese in Teaching 1	Core	1	-
PCU505	Use of Chinese in Teaching 2	Core	1	-
PCU506	Use of Malay in Teaching 1	Core	1	-
PCU507	Use of Malay in Teaching 2	Core	1	-
PCU508	Use of Tamil in Teaching 1	Core	1	-
PCU509	Use of Tamil in Teaching 2	Core	1	-

☒ This module is offered on a Pass/Fail basis. The module must be passed in order to fulfil programme requirements.

### Use of English in Teaching

#### PCU501 Use of English in Teaching

Oral communication designed to improve the ability of trainee teachers to be more effective as communicators in the classroom. Various aspects of language communication commonly employed in the classroom and the modalities used to effect such communication. Aspects of speech, voice projection and modulation, effective techniques of reading text aloud, oral presentations and various modes of classroom talk.

## **Use of Chinese in Teaching**

### **PCU504 Use of Chinese in Teaching 1**

The development of oral communication skills. Phonetics, speech skills, and effective classroom communication. Errors in Mandarin pronunciation with regard to vowels and consonants, the four tones and the change of tone with specific words.

### **PCU505 Use of Chinese in Teaching 2**

More effective use of Mandarin for the teaching of Chinese. Practical knowledge and skills in Hanyu Pinyin, accurate pronunciation and standard Mandarin speech. The application of speech skills in the classroom situation.

## **Use of Malay in Teaching**

### **PCU506 Use of Malay in Teaching 1**

The development of communicative proficiency in the use of Malay in primary schools. Accuracy and mastery in pronunciation, including the new pronunciation system (Sebutan Baku) and communication skills inside and outside the classroom. Reading aloud, spontaneous dialogue, giving instructions, questioning techniques, explaining concepts, lecturing and debating skills.

### **PCU507 Use of Malay in Teaching 2**

Greater exposure and practice for trainee teachers to develop their proficiency and confidence as Malay Language teachers in the primary school. Essay and letter writing, report writing, academic and creative writing. Literacy in Jawi will be included.

### **Use of Tamil in Teaching**

#### **PCU508 Use of Tamil in Teaching 1**

The development of oral proficiency in Tamil. The phonetics of Tamil, pronunciation and other communication skills inside and outside the classroom.

#### **PCU509 Use of Tamil in Teaching 2**

The development of written communication skills. Common errors in writing and Tamil syntax.

**PGDE PROGRAMME SPECIALISING IN SECONDARY  
SCHOOL TEACHING**

## CURRICULUM STRUCTURE

The curriculum structures for various specialisations of the PGDE (Secondary) programme are shown in Tables 5 and 6 below:

**Table 5 : Curriculum Structure of the PGDE (Secondary) Programme**

Category/ Subject	Module Code	Title	No. of AUs
<b>EDUCATION STUDIES</b>			
	PED513	Instructional Technology	2
	PED514	Social Context of Teaching and Learning	2
	PED515	The Psychology of Pupil Development and the Learning Process	2
	PED516	Teaching and Classroom Management	2
<b>EDUCATION SCIENCE</b>			
	PED551	Assessment for Effective Learning	2
	PED552	Guidance and Counselling in Secondary Schools	2
	PED553	Teaching Pupils with Behavioural and Learning Problems	2
	PED554	Instructional Design and Computer-based Learning	2
	PED558	The Psychology of Learning and Motivation	2
	PED559	Classroom Management and Discipline	2
	PED560	Strategies for Effective Thinking and Learning	2
	PED561	Using Pupil Learning Style to Maximise Instructional Effectiveness	2
	PED562	Classroom Planning to Enhance Pupil Learning	2
	PED563	Understanding and Helping Gifted and Talented Pupils	2
	PED565	Understanding and Teaching Creative and Critical Thinking	2
	PED566	Motivating Pupils for Learning and Thinking	2
	PED567	Assessment to Promote Thinking in Secondary Schools	2

cont'd

Category/ Subject	Module Code	Title	No. of AUs
	PED569	Developing Creativity in the Secondary Classroom	2
	PED570	Understanding Social Behaviour of Secondary School Students	2
	PED571	Advanced Social and Educational Measurement	2
	PED572	Instructional Strategies and Learning Effectiveness	2
	PED574	Handling Crises	2
	PED575	Computer Applications in Educational Assessment	2
	PED576	Motivating Students to Learn and Think	2
	PED577	Achieving the Desired Outcomes of Education through Project Work in Secondary Schools	2
	PED578	Using IT for Teaching and Assessment	2
	PED579	Facilitating Sexuality Education in Secondary Schools	2
	PED580	Constructive Learning with the Internet	2
	PED581	What it means to be a Teacher	2
	PED582	Creating Constructivist Activities with ICT	2
	PED583	Schooling in Meritocratic Societies	2
	PED584	How Schools Really Works	2
	PED585	Moral Education Across the Curriculum	2
	PED586	A New Learning Paradigm for Schools: The Learning Organisation (LO) Approach	2
	PED587	Rebels with a Cause!	2
	PED588	Investing in Social Capital: Building Effective Relationships with Educational Stakeholders.	2
	PED589	Surviving and Thriving as a Beginning Teacher	2
	PCK	The Teaching of Accounting	8
	PCA	The Teaching of Art	8
	PCB	The Teaching of Biology	8
	PCY	The Teaching of Chemistry	8
	PCF	The Teaching of Commerce/Management	8
	PCQ	The Teaching of Computer Applications	8
	PCN	The Teaching of Design and Technology	8
	PCO	The Teaching of Economics	8
	POA	The Teaching of Elements of Office Administration	8
	PCE	The Teaching of English Language	8+2
	PCG	The Teaching of Geography	8

cont'd

Category/ Subject	Module Code	Title	No. of AUs
	PCW	Guidance & Counselling	8
	PCH	The Teaching of History	8
	PCX	The Teaching of Home Economics	8
	PCR	The Teaching of Lower Secondary English Literature	8
	PCG	The Teaching of Lower Secondary Geography	10
	PCH	The Teaching of Lower Secondary History	10
	PCM	The Teaching of Lower Secondary Mathematics	8
	PCD	The Teaching of Malay Language	8
	PCM	The Teaching of Mathematics	8
	PCI	The Teaching of Music	8
	PCP	The Teaching of Physics	8
	PCT	The Teaching of Tamil Language	8
	PPR511❖	Practicum	0
Use of English in Teaching	PCU511☒	Use of English in Teaching	0
Use of Malay in Teaching	PCU516+	Use of Malay in Teaching 1	1
	PCU517+	Use of Malay in Teaching 2	1
Use of Tamil in Teaching	PCU518**	Use of Tamil in Teaching 1	1
	PCU519**	Use of Tamil in Teaching 2	1

- ❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.
- ☒ This module is offered on a Pass/Fail basis. A Pass is required in order to fulfil the programme requirements.
- + In addition to the Use of English in Teaching, trainee teachers doing the Teaching of Malay Language as their second CS subject must do Use of Malay in Teaching.
- ++ In addition to the Use of English in Teaching, trainee teachers doing the Teaching of Tamil Language as their second CS subject must do Use of Tamil in Teaching.

**Table 6 : Curriculum Structure of the PGDE (Teaching of CL/ML/TL at Secondary Level) Programme**

Category/ Subject	Module Code	Title	No. of AUs
	PED513	Instructional Technology	2
	PED514	Social Context of Teaching and Learning	2
	PED515	The Psychology of Pupil Development and the Learning Process	2
	PED516	Teaching and Classroom Management	2
	PED551	Assessment for Effective Learning	2
	PED552	Guidance and Counselling in Secondary Schools	2
	PED553	Teaching Pupils with Behavioural and Learning Problems	2
	PED554	Instructional Design and Computer-based Learning	2
	PED558	The Psychology of Learning and Motivation	2
	PED559	Classroom Management and Discipline	2
	PED560	Strategies for Effective Thinking and Learning	2
	PED561	Using Pupil Learning Style to Maximise Instructional Effectiveness	2
	PED562	Classroom Planning to Enhance Pupil Learning	2
	PED563	Understanding and Helping Gifted and Talented Pupils	2
	PED565	Understanding and Teaching Creative and Critical Thinking	2
	PED566	Motivating Pupils for Learning and Thinking	2
	PED567	Assessment to Promote Thinking in Secondary Schools	2
	PED569	Developing Creativity in the Secondary Classroom	2
	PED570	Understanding Social Behaviour of Secondary School Students	2
	PED571	Advanced Social and Educational Measurement	2
PED572	Instructional Strategies and Learning Effectiveness	2	

cont'd

Category/ Subject	Module Code	Title	No. of AUs
	PED574	Handling Crises	2
	PED575	Computer Applications in Educational Assessment	2
	PED576	Motivating Students to Learn and Think	2
	PED577	Achieving the Desired Outcomes of Education through Project Work in Secondary Schools	2
	PED578	Using IT for Teaching and Assessment	2
	PED579	Facilitating Sexuality Education in Secondary Schools	2
	PED580	Constructive Learning with the Internet	2
	PED581	What it means to be a Teacher	2
	PED582	Creating Constructivist Activities with ICT	2
	PED583	Schooling in Meritocratic Societies	2
	PED584	How Schools Really Works	2
	PED585	Moral Education Across the Curriculum	2
	PED586	A New Learning Paradigm for Schools: The Learning Organisation (LO) Approach	2
	PED587	Rebels with a Cause!	2
	PED588	Investing in Social Capital: Building Effective Relationships with Educational Stakeholders.	2
	PED589	Surviving and Thriving as a Beginning Teacher	2
<b>Chinese Language</b>	PCC511	Teaching of Chinese Language 1	5
	PCC512	Teaching of Chinese Language 2	3
<b>Malay Language</b>	PCD510	Teaching of Malay Language 1	5
	PCD511	Teaching of Malay Language 2	3
<b>Tamil Language</b>	PCT511	Teaching of Tamil Language 1	5
	PCT512	Teaching of Tamil Language 2	3
<b>Chinese Literature</b>	PCJ511	Teaching of Chinese Literature 1	6
	PCJ512	Teaching of Chinese Literature 2	2
<b>Malay Literature</b>	PCJ513	Teaching of Malay Literature 1	6
	PCJ514	Teaching of Malay Literature 2	2
<b>Tamil Literature</b>	PCJ515	Teaching of Tamil Literature 1	5
	PCJ516	Teaching of Tamil Literature 2	3
	PPR511 ♦	Practicum	0

cont'd

Category/ Subject	Module Code	Title	No. of AUs
<b>LANGUAGE PROFICIENCY AND ACADEMIC DISCOURSE SKILLS (Select the same language as in your Curriculum Studies)</b>			
Use of Chinese in Teaching	PCU514	Use of Chinese in Teaching 1	1
	PCU515	Use of Chinese in Teaching 2	1
Use of Malay in Teaching	PCU516	Use of Malay in Teaching 1	1
	PCU517	Use of Malay in Teaching 2	1
Use of Tamil in Teaching	PCU518	Use of Tamil in Teaching 1	1
	PCU519	Use of Tamil in Teaching 2	1

- ❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

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## CONTENTS OF CORE MODULES AND PRESCRIBED ELECTIVES

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### EDUCATION STUDIES

Education Studies will acquaint trainee teachers with the key concepts and principles in education that are necessary for effective instruction and reflective practice in secondary schools. The modules will deal with pupil development, the social context within which schooling operates, the application of psychology in teaching and learning, proactive approaches to develop creative and critical thinking skills and the use of instructional technologies in the classroom.

The Education Studies component comprises two groups of modules namely *CORE MODULES* and *PRESCRIBED ELECTIVES*. The core modules are compulsory as they deal with basic educational concepts and principles. The prescribed electives allow choices which are intended to provide trainee teachers with an opportunity for in-depth and rigorous study of some significant areas in the field of education and to serve as a basis for the application of educational principles in a variety of instructional contexts.

## Education Studies

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PED513	Instructional Technology	Core	2	-
PED514	Social Context of Teaching and Learning	Core	2	-
PED515	The Psychology of Pupil Development and the Learning Process	Core	2	-
PED516	Teaching and Classroom Management	Core	2	-
PED551	Assessment for Effective Learning	Prescribed	2	-
PED552	Guidance and Counselling in Secondary Schools	Prescribed	2	-
PED553	Teaching Pupils with Behavioural and Learning Problems	Prescribed	2	-
PED554	Instructional Design and Computer-based Learning	Prescribed	2	-
PED558	The Psychology of Learning and Motivation	Prescribed	2	-
PED559	Classroom Management and Discipline	Prescribed	2	-
PED560	Strategies for Effective Thinking and Learning	Prescribed	2	-
PED561	Using Pupil Learning Style to Maximise Instructional Effectiveness	Prescribed	2	-
PED562	Classroom Planning to Enhance Pupil Learning	Prescribed	2	-
PED563	Understanding and Helping Gifted and Talented Pupils	Prescribed	2	-
PED565	Understanding and Teaching Creative and Critical Thinking	Prescribed	2	-
PED566	Motivating Pupils for Learning and Thinking	Prescribed	2	-
PED567	Assessment to Promote Thinking in Secondary Schools	Prescribed	2	-

cont'd

<b>Module Code</b>	<b>Title</b>	<b>Module Category</b>	<b>No. of AUs</b>	<b>Pre-requisites</b>
PED569	Developing Creativity in the Secondary Classroom	Prescribed	2	-
PED570	Understanding Social Behaviour of Secondary School Students	Prescribed	2	-
PED571	Advanced Social and Educational Measurement	Prescribed	2	-
PED572	Instructional Strategies and Learning Effectiveness	Prescribed	2	-
PED574	Handling Crises	Prescribed	2	-
PED575	Computer Applications in Educational Assessment	Prescribed	2	-
PED576	Motivating Students to Learn and Think	Prescribed	2	-
PED577	Achieving the Desired Outcomes of Education through Project Work in Secondary Schools	Prescribed	2	-
PED578	Using IT for Teaching and Assessment	Prescribed	2	-
PED579	Facilitating Sexuality Education in Secondary Schools	Prescribed	2	-
PED580	Constructive Learning with the Internet	Prescribed	2	-
PED581	What it means to be a Teacher	Prescribed	2	-
PED582	Creating Constructivist Activities with ICT	Prescribed	2	-
PED583	Schooling in Meritocratic Societies	Prescribed	2	-
PED584	How Schools Really Works	Prescribed	2	-
PED585	Moral Education Across the Curriculum	Prescribed	2	-
PED586	A New Learning Paradigm for Schools: The Learning Organisation (LO) Approach	Prescribed	2	-
PED587	Rebels with a Cause!	Prescribed	2	-
PED588	Investing in Social Capital: Building Effective Relationships with Educational Stakeholders.	Prescribed	2	-
PED589	Surviving and Thriving as a Beginning Teacher	Prescribed	2	-

### **PED513 Instructional Technology**

Learning, thinking, and the effective use of instructional technologies in the classroom; instructional planning models; selecting, creating, evaluating, and integrating instructional technologies and resource materials; promoting creativity and complex thinking through IT project work activities; organising and managing instructional activities with appropriate IT resources in the classroom.

### **PED514 Social Context of Teaching and Learning**

The historical development, structure and organisation of the Singapore education system; key education policies. Sociological perspectives on teaching, learning and socialisation: the school and society; home and school; effective school organisation; teaching as a profession. Philosophical perspectives on teaching and learning: the concept of education; moral education; authority, freedom and education.

### **PED515 The Psychology of Pupil Development and the Learning Process**

Understanding different aspects of adolescent development and how these influence the teaching and learning processes. It covers physical changes in adolescence, stages of moral development, formation of identity 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 to develop creative and critical

thinking, problem-solving skills and remedial measures to help weaker pupils.

### **PED516 Teaching and Classroom Management**

Emphasis on the application of pedagogical knowledge and instructional skills for facilitating learning, the understanding of different models of classroom management and the role of classroom management in fostering academic achievement and appropriate pupil behaviour in different classroom settings such as, computer and science laboratories and subject rooms, and the process of evaluating the teaching-learning process. In addition, the importance of the practices of proactive classroom management and positive interpersonal teacher behaviour on classroom learning is stressed.

### **PED551 Assessment for Effective Learning**

Role of assessment in the learning process; assessment practices in Singapore schools; basic knowledge and practical skills of monitoring and assessing pupils' learning; essentials of measurement in the cognitive, affective and behavioural domains; the use and construction of classroom tests; item analysis and test reporting; basic statistics for educational measurement; use of computer in educational assessment; evaluation of teaching and learning.

## **PED552 Guidance and Counselling in Secondary Schools**

Principles and practice of Pastoral Care and Career Guidance and its introduction to Singapore schools; group dynamics in the classroom and techniques in developmental group guidance; social and psychosocial factors affecting the personal development and learning of pupils; assessment of guidance needs; career development and career guidance needs of adolescents; the helping process and basic counselling skills.

## **PED553 Teaching Pupils with Behavioural and Learning Problems**

Types and classification of behavioural and learning problems; identification and diagnosis; causal factors; behaviour management; multidisciplinary approach in evaluation and intervention.

## **PED554 Instructional Design and Computer-based Learning**

The application of effective instructional software design principles to design, develop and evaluate a small web-based learning project. The use of a variety of software technologies, including appropriate authoring tools to create web-based learning objects. Participants for this course must have very good computer skills and have to attend appropriate software training prior attendance to this module.

## **PED 558 The Psychology of Learning and Motivation**

The role of the teacher as a motivator; motivating and demotivating factors affecting learning; strategies for motivating different types of learners.

## **PED559 Classroom Management and Discipline**

Recent research and development in classroom management and implications for teaching; teacher expectations/behaviours and their influence on pupil behaviour; establishing a supportive learning environment; issues in classroom management approaches and principles and practice of effective classroom management and discipline.

## **PED560 Strategies for Effective Thinking and Learning**

The place of thinking skills in teaching and learning; different types of thinking skills; the role of the teacher in creating a learning environment conducive for thinking; relevant thinking programmes and their implications for classroom practice; teaching thinking skills to enhance learning; observing, monitoring and evaluating the development of thinking skills in the learner.

## **PED561 Using Pupil Learning Style to Maximise Instructional Effectiveness**

Learning styles as one of the crucial factors for pedagogical decisions. The 'mind qualities' of the learners in terms of teaching strategies that can be used to maximise effective learning in the classroom.

## **PED562 Classroom Planning to Enhance Pupil Learning**

Planning of programmes, classroom practices and resources to meet the needs of individual students; making effective use of audiovisual resources; support materials and different strategies to encourage active learning; encouraging students to become autonomous learners.

## **PED563 Understanding and Helping Gifted and Talented Pupils**

Definition of terms; issues; concept of "academic excellence"; nature and identification of high ability pupils; development of the gifted education movement from Plato to the present time; overview of gifted education world-wide; justification for and against special provisions for the gifted; the role of the home and school; strategies to promote the growth and development of gifted and talented pupils.

## **PED565 Understanding and Teaching Creative and Critical Thinking**

Preview of alternative conceptions of critical and creative thinking. Characteristics and competencies of critical and creative thinkers. Instruments to assess critical and creative thinking. Opportunities to diagnose thinking dispositions. Advice provided on how teachers can bring about critical and creative thinking in the context of the classroom.

## **PED566 Motivating Pupils for Learning and Thinking**

Skills that teachers can acquire to promote pupils' learning and thinking. Enabling pupils to learn for retention. Thinking organisers for critical thinking and structures for creative thinking. Preparing teachers to create a motivating classroom environment for effective learning and thinking.

## **PED567 Assessment to Promote Thinking in Secondary Schools**

Understanding and applying the basic principles in assessment to the classroom situation. Basic knowledge and practical skills to manage and monitor pupils' learning at the secondary level. Covers alternative modes of assessment to assess different thinking skills.

## **PED569 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.

### **PED570 Understanding Social Behaviour of Secondary School Students**

Social behaviour in the school and classroom; how students and teachers think about and interact with each other; how students think about their own attitudes and behaviour and how these are influenced by situational and social factors; self-esteem; social identity; helping and aggressive behaviour; obedience and conformity; leadership; and close relationships.

### **PED571 Advanced Social and Educational Measurement**

Essential topics in advanced social and educational measurement, particularly in Item Response Theory (IRT) and attitude measurement models; quantitative study and applications; some basic knowledge of probability and statistics; the usage and application of related computer software integrated with the theory of advanced social and educational measurement.

### **PED572 Instructional Strategies and Learning Effectiveness**

Careful planning and implementation of instruction for effective learning; various instructional strategies such as whole-class teaching, small group instruction, group work, individual instruction, out-of-classroom instruction, games and simulation and their effective implementation for facilitating learning in the classroom; the importance of empowerment of students in learning and the teaching of thinking and learning strategies to students during the process of instruction.

## **PED574 Handling Crises**

Preparing teachers for a variety of crises that may arise in secondary school classrooms. Teachers' responsibilities and options for action in crises. An overview of challenges resulting from substance abuse, street gangs, suicidal behaviour, date rape, family tensions and other personal as well as health-related emergencies. Current community resources available to secondary school teachers handling such crises.

## **PED575 Computer Applications in Educational Assessment**

State-of-the-art computer software for various assessment tasks, including item banking, item analysis, item calibration, test construction, test administration, test scoring and test reporting, and their applications for school-based testing. An examination of some benefits and/or limitations of using computers for educational assessment.

## **PED576 Motivating Students to Learn and Think**

Students learn well when they are highly motivated. Teachers can acquire strategies to instil positive attitude and perceptions about learning among their students. Knowing how the brain learns also enables teachers to use brain compatible teaching strategies so that students will learn better and faster. Using cooperative learning activities and catering to different learning styles will enable more students to acquire learning-to-learn and thinking skills in an enjoyable manner.

### **PED577 Achieving the Desired Outcomes of Education through Project Work in Secondary Schools**

The module attempts to relate the initiatives introduced through the concept of "Thinking School Learning Nation" (1997) to the Desired Outcomes of Education (1998). The rationale for the inclusion of Project Work as one of the criteria for University admission will be discussed. Ways of building teamwork, application of thinking strategies, infusion of thinking skills, development of metacognitive skills, critical thinking, creative thinking, management of group project and assessment of group project work will be the topics covered in this module. Assessment of this module will be by group project. Marks will be given for individual reflective journal writing and peer evaluation. This mode of assessment will give participants a chance to be acquainted with the task awaiting for them in school.

### **PED578 Using IT for Teaching and Assessment**

The use of IT in schools is a key strategy laid out by Singapore's Masterplan for IT in Education. School teachers are called upon to use IT in their teaching to help pupils with learning skills, creative thinking and communication skills. This module is designed to prepare trainee teachers with some essential IT techniques to create an IT-enhanced learning environment and conduct IT-based classroom assessment. Participants of this module are supposed to have taken the IT workshops or have equivalent knowledge and skills. The techniques covered by this module include classroom presentation, simple data analysis from educational assessment and psychological measurement.

## **PED579 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 gain basic knowledge of physiological changes and development in adolescents, but also develop an awareness of attitudes and emotional, cultural and moral issues. They will participate in hands-on activities that facilitate and promote discussions. Topics such as gender roles, sexual health and behaviour, and intimate relationships, as well as issues such as contraception, abortion and homosexuality will be addressed.

## **PED580 Constructive Learning with the Internet**

In this knowledge and information age, ability to process information and to construct one's knowledge has become an important life skill. To remain a confident and competent citizen in this new millennium, one has to be a life-long and self-directed learner. Internet is perhaps the fastest expanding source of information and its potential as educational resources is tremendous. This course aims to provide trainee teachers an understanding of the affordances of the Internet and its various applications in education so that they can use Internet effectively in teaching and in encouraging self-directed constructive learning.

## **PED581 What It Means To Be Teacher**

The course will initiate trainee teachers to two traditional paradigms of teaching: teaching as transmission of knowledge and skills and as transformation of character, virtue and thought. It will explore the challenge and uncertainty, the personal creativity and commitment, the moral and intellectual dimensions of teaching. It intends to expose trainee teachers to other aspects of teaching that tend to be overlooked, and lead trainee teachers to a deepened appreciation of being a teacher and a heightened sense of its worth.

## **PED582 Creating Constructivist Activities with ICT**

Use of various IT-based tools to design and create various constructivist activities to help pupils learn; various aspects on the theoretical framework of constructivism and cognitivism; various strategies of using tools to promote creativity and thinking; use of IT tools like semantic networking, multimedia authoring tools, and office productivity software.

## **PED583 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.

## **PED584 How Schools Really Work**

Ask most young adults whether the schools they attended developed their full potential and the answer will probably be “NO”. This not surprising as schools have historically failed as many students as they have passed. But nowadays we are constantly being told that the process of globalisation and the shift towards a knowledge-based economy will change this. It is said that all abilities will be developed to the full and students will for the first time have genuine equality of educational opportunity. But how easy is it to change our schools? How are schools related to the broader society? What processes are at work in schools that make change difficult to accomplish? On this module we shall explore a number of sociological themes such as the process of differentiation and subcultural formation, cultural deprivation and cultural reproduction, school and classroom culture, the hidden curriculum, teacher strategies and the role of the teacher. We shall look at case studies of improving schools in Singapore and research into school effectiveness.

## **PED585 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 explores the various facets of a teacher's work in the classroom, school and community, in order to show that all subject teachers, not only Civics and Moral Education teacher, 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 moral practice, no matter what subject they teach and what CCA they conduct.

## **PED586 A New Learning Paradigm for Schools: The Learning Organisation (LO) Approach**

Are we teaching what we ought to be teaching in the way that we ought to teach? Are our students learning what they ought to be learning in the way they ought to learn? How can teachers promote more effective and efficient learning through the practice of the five disciplines of the Learning Organisation (LO), namely, Personal Mastery, Mental Models, Shared Vision, Team Learning and Systems Thinking. This module is an introduction to how beginning teachers can be employed for their classroom and school-wide interactions with other participants of the school organisation.

## **PED587 Rebels with a Cause!**

This module examines a number of controversial rebel educators who rocked the boat of established educational ideas and practices throughout history. Examples of rebel philosophy include:

- “ Do not tell a child anything which learn for himself” (Rousseau).
- “ Education must harmonize with nature” (Pestalozzi).
- “ Replace authority in schools with freedom” (A.S.Neill).
- “ Children should be allowed to follow their own interests” (Bertrand Russell).
- “ Schools encourage children to act stupidly” (John Holt).

These controversial statements will be discussed in terms of their relevance to the prevailing socio-economic environment in Singapore today. Students enrolled in this module will be encouraged to reflect on the material presented through lectures, tutorials, student seminar presentations, formal debates, films and informal discussions.

## **PED588 Investing in Social Capital: Building Effective Relationships with Educational Stakeholders**

This module explores the key concept of social capital and how school professionals can leverage on social capital to build a positive school-community links with major educational stakeholders. It examines examples of cross-cultural research on the benefits of parental involvement in schooling and provides opportunities for basic research into parent-

teacher relationships in Singapore and strategies for creative partnerships at primary and secondary levels of schooling.

### **PED589 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 a) discuss and clarify their aspirations, expectations, fears and concerns; b) understand some of the key roles, responsibilities and challenges awaiting them in their relationships with other stakeholders in the school system, and c) think about their career progression beyond the initial years.

## CURRICULUM STUDIES

The Curriculum Studies options are teaching subjects relevant to the needs of secondary schools, junior colleges and centralised institutes. The aim in teaching Curriculum Studies is to expose trainee teachers to the syllabi and textbooks in the curriculum and train the trainee teachers in the methods and techniques of teaching subjects at the secondary and junior college levels. Trainee teachers in training will be assigned to specialise in two curriculum subject areas.

### The Teaching of Accounting

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCK511	Teaching Principles of Accounts at Secondary Level	Core	6	-
PCK513	Assessment and Further Strategies in Teaching Principles of Accounts	Core	2	-

### PCK511 Teaching Principles of Accounts at Secondary Level

The rationale and structure of Principles of Accounts in the school curriculum; selection and sequencing of subject content based on the thematic learning approach. Application of a variety of strategies and resources for teaching and learning of Principles of Accounts, including cooperative learning, peer tutoring, mastery learning, and practice sets. Application of frameworks like Dimensions of Learning, learning styles and brain-based learning in teaching express and normal course pupils. Using technology in Accounting education. Lesson planning and micro-teaching of selected topics in the Principles of Accounts syllabus, with peer feedback and self-reflection.

### **PCK513 Assessment and Further Strategies in Teaching Principles of Accounts**

Modes of assessment and examination requirements for Principles of Accounts at 'O' level and Principles of Accounting at 'A' level; test analysis and construction, diagnosis, feedback and remediation. Extending teaching strategies to 'A' Level Accounting at centralised institutes. Development of higher level thinking skills in Accounting through inquiry and guided discovery, problem-solving and case studies.

## The Teaching of Art

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCA511	Teaching Art at the Secondary Level	Core	1	-
PCA512	Artistic Processes and the Art Curriculum I	Core	3	-
PCA513	Ceramics	Core	2	-
PCA515	Artistic Processes and the Art Curriculum II	Core	2	-

### **PCA511 Teaching Art at the Secondary Level**

A survey of historical and theoretical developments in secondary art education with particular emphasis on recent international theories and practices in the field regarding creativity and their importance for art education in Singapore. Strategies for the implementation of IT to expand the range of available creative options. The infusion of National Education (NE) into the art curriculum.

### **PCA512 Artistic Processes and the Art Curriculum I**

Study of an area of two-dimensional studio practice that can be used at the secondary level. Exploration of the theoretical underpinnings of different creative art practices and the curricular implications of IT and NE in a developmental approach to encourage the intellectual and emotional development of students in the secondary school.

### **PCA513 Ceramics**

An introduction to the teaching of ceramics at the secondary level including a range of ceramic forming techniques and exploration of decoration, glazing and firing techniques. Emphasis on a creatively developmental approach with due consideration of the incorporation of IT and NE.

### **PCA515 Artistic Processes and the Art Curriculum II**

Building on the Semester 1 modules, the development by trainee teachers of a body of work in a chosen area of studio practice, to be used as a focus to investigate aspects of secondary art education such as syllabus and lesson planning and development including the use of IT. Evaluation strategies as transferable skills. The rich multicultural heritage and recent history of Singapore as a locus of student identity.

## The Teaching of Biology

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCB511	Teaching of Biology I	Core	2	-
PCB512	Teaching of Biology II	Core	4	-
PCB513	Teaching of Biology III	Core	2	-

### PCB511 Teaching of Biology I

Three areas of psychological concern that underline the teaching of Biology/Science.

- The nature of science : a paradigm for the analysis and rationale of the biology curriculum in schools.
- Concept Learning : including individual differences between pupils in different ability streams; readiness and sequential learning; learning styles; perceptual and conceptual differences; misconceptions, alternative conception and conceptual change; and meaningful learning.
- Thinking and Learning : with creative and critical thinking; cognitive development, inductive - deductive learning; problem-solving and inquiry/discovery learning.

## **PCB512 Teaching of Biology II**

The Biological Sciences curriculum in Singapore schools from Primary Science to Pre-University levels, vis-à-vis the relevant syllabi, textbooks, teachers' guides and reference journals. Guidance/coaching in the planning of Biology lessons for pupils of different ability ranges and levels in secondary schools. Basic teaching skills together and the variety of teaching/learning strategies, thinking/study skills and cooperative learning strategies. Practice of these skills in camera. The management and control of pupil behaviour together with safety practices in science laboratories. IT and its application for Biology teaching with reference to material and resources from the Internet.

## **PCB513 Teaching of Biology III**

Issues on the what and why of testing in science, formulating tables of specification for test construction, worksheet preparation, practical skills assessment, marking of examination scripts, analysis of test scores and its implications for teachers and teaching styles. The role of resource centres in planning for field trips in Biology teaching outside the classroom. A planned field trip will be conducted to a suitable resource centre/nature reserve. Instructional materials to teach the Life Sciences programs in schools will be introduced, with innovative and creative activities and experiments tried out and discussed.

## The Teaching of Chemistry

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCY511	The Teaching of Chemistry I	Core	4	-
PCY512	The Teaching of Chemistry II	Core	2	-
PCY513	The Teaching of Chemistry III	Core	2	-

### PCY511 The Teaching of Chemistry I

Basic 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 into the chemistry curriculum. The planning and teaching strategies crucial for the effective teaching of chemistry that includes unit and lesson planning, the inquiry approach, constructivist approach, problem-solving, expository teaching, demonstrations, practical work and project work. The preparation and use of teaching aids and resource materials.

### PCY512 The Teaching of Chemistry II

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. Trainee teachers practise the relevant skills through mini-presentations on selected chemistry topics at the secondary level. Presentations by trainee teachers are reviewed and critiqued by peers and the tutor.

### **PCY513 The Teaching of Chemistry III**

The effective evaluation of chemistry teaching and learning. Purposes of evaluation, tables of specifications, tests 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 in particular, the use of project work will be considered. The management of the Chemistry laboratory and laboratory safety will also be discussed.

## The Teaching of Chinese Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCC511	Teaching of Chinese Language 1	Core	5	-
PCC512	Teaching of Chinese Language 2	Core	3	-

### **PCC511 Teaching of Chinese Language 1**

Different theories of language acquisition. Various approaches to the teaching of Chinese in the bilingual context of Singapore. The development of listening, speaking and reading skills with various levels of thinking skills. Chinese language testing. IT for the teaching of Chinese language.

### **PCC512 Teaching of Chinese Language 2**

Various approaches to the teaching of Chinese vocabulary and syntax. The objectives and various approaches to the teaching of writing skills with various levels of thinking skills. IT for the teaching of Chinese language.

## The Teaching of Chinese Literature

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCJ511	Teaching of Chinese Literature 1	Core	6	-
PCJ512	Teaching of Chinese Literature 2	Core	2	-

### **PCJ511 Teaching of Chinese Literature 1**

The aims and objectives of teaching Chinese literature. Criteria for selecting literary texts and reading materials. Teaching of the history of Chinese literature. Various approaches and strategies for the teaching of Chinese poetry, short stories and novels. Questions with various levels of thinking skills for teaching and testing. IT for the teaching of Chinese literature.

### **PCJ512 Teaching of Chinese Literature 2**

The organisation of meaningful activities for the appreciation of Chinese prose and drama. Questions with various levels of thinking skills for teaching and testing. IT for the teaching of Chinese literature.

## The Teaching of Commerce/Management

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCF511	Teaching Commercial Studies to 'N' Pupils	Core	4	-
PCF512	Teaching Computing in Commercial Studies	Core	2	-
PCF513	Instructional Approaches for Management of Business	Core	2	-

### PCF511 Teaching Commercial Studies to 'N' Pupils

Developing basic skills for teaching Commerce in Singapore schools. Managing 'N' level pupils. Analysing the Commercial Studies syllabus. Introduction of a variety of classroom methods relevant to the teaching and learning of Commercial Studies at 'O' level. Planning Commerce lessons; applying various teaching strategies and techniques. Demonstrating teaching skills and competencies through micro-teaching. Developing critique and self-reflection abilities. Different methods of assessment to facilitate effective learning in Commercial Studies. Information technology in commerce education.

### **PCF512 Teaching Computing in Commercial Studies**

Rationale for computing in Commercial Studies syllabus. 'N' level pupils' attitude towards computers. Managing computer facilities and pupil behaviour in the computer laboratory. Preparing to teach computing in commercial studies using various instructional approaches, strategies and materials. Practise computing teaching skills in micro-teaching sessions. Assessment in the computing component of the commercial studies syllabus; designing tests, diagnosis of learning and remediation.

### **PCF513 Instructional Approaches for Management of Business**

Introduction to the Management of Business curriculum at the commercial institutes. Use of inquiry/discovery/investigative methods to develop higher-order thinking abilities: cooperative group work, discussion, case studies, role-playing, project work, simulated decision-making and problem-solving.

## The Teaching of Computer Applications

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCQ522	Topics in Computer Applications	Core	4	-
PCQ524	Computer Laboratories and Resources	Core	1	-
PCQ526	Assessment and Coursework	Core	2	-
PCQ527	Instructional Approaches in Computer Applications	Core	1	-

### PCQ522 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 during micro-teaching sessions. Tutor and fellow students give feedback and suggestions on various aspects of teaching competencies for reflection and further practice.

### PCQ524 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.

## **PCQ526 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.

## **PCQ527 Instructional Approaches in 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 during micro-teaching sessions.

## The Teaching of Design and Technology

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCN511	Teaching and Evaluating the Problem Solving Process	Core	3	-
PCN512	Materials Processing	Core	3	-
PCN513	Managing and Teaching the Design and Technology Curriculum	Core	2	-

### **PCN511 Teaching and Evaluating the Problem Solving Process**

Strategies to teach problem solving in the Design and Technology curriculum. Introduction to the teaching of graphic communication skills. Product research, creative and critical thinking skills, anthropometry and ergonomics, modelling and computer-aided design. Experience in coming to grips with self-identified problem and the production of a folio. Hands-on experience in the evaluation of folios and artefacts according to prescribed marking scheme. A simulated environment to analyse and evaluate trainee teachers' own teaching efforts through peer teaching sessions with special emphasis on introductory procedures and closures, questioning skills and practical workshop demonstrations. Encouragement will be given towards solutions of problems that have elements of National Education in them.

### **PCN512 Materials Processing**

Correct and safe work habits and selection of the appropriate technique in the use of materials as expected of all Design and Technology teachers. Hands-on experience, which includes an integration of design and multi-material approach to project work to

enable student teachers to provide advice on solutions to design problems. Properties and working characteristics of materials, processes involving setting and marking out, shaping by wasting and forming, methods of joining, surface finishing and heat treatment, safe and correct usage and maintenance of basic hand tools. The production of simple electronic devices. Hands-on experience in the use of common basic machines used in secondary schools. The safe operations of the basic machines through the different stages of mini projects. Use of powered hand tools and simple computer assisted machining tools. As far as possible, elements of National Education will be incorporated in the designs of the finished artefacts.

### **PCN513 Managing and Teaching the Design and Technology Curriculum**

The Design and Technology syllabus for 'O' level in relation to its philosophy, implementation and evaluation. An in-depth analysis of the curriculum in conjunction with the development of a scheme of work. Aspects on workshop organisation and management, resource and facilities planning and safe practices in the workshop. An integrated approach to the teaching of the common processes involving wood, metal, and plastics - their characteristics and workability. The selection of appropriate materials and processes in the development of artefacts. The effective integration of 'technology' into the curriculum. National Education issues on the change to Design and Technology instead of teaching the crafts are incorporated.

## The Teaching of Economics

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCO511	Basic Approaches to Teaching A-level Economics	Core	5	-
PCO512	Further Instructional Approaches and Assessment of A-level Economics	Core	3	-

### **PCO511 Basic Approaches to Teaching A-level Economics**

Introduction to the A-level Economics curriculum and basic strategies for teaching the subject in the Singapore junior college. Discussion of curriculum aims and examination requirements. Selection of content and planning of units and lessons. Organising pupils for learning in large and small groups. Techniques of explaining economic concepts and principles and the applications that can be made with case studies and economic data.

### **PCO512 Further Instructional Approaches and Assessment of A-level Economics**

Classroom-based approaches and inquiry-based activities for the development of selected thinking skills and application of IT. The approaches include critical thinking, decision-making, inquiry learning and the use of WinEcon courseware and economic resources that may be found on the internet. Modes of assessment designed to test various forms and levels of economic understanding.

## The Teaching of Elements of Office Administration

Module Code	Title	Module Category	No. of AUs	Pre-requisites
POA511	Teaching Office Administration to 'N' Pupils	Core	5	-
POA513	Teaching Computing in Office Administration	Core	3	-

### **POA511 Teaching Office Administration to 'N' Pupils**

Introduction of some basic office administration concepts and skills essential to operate effectively in the work environment. Functions of the office, office communications, document storage and retrieval, mail handling, receipts and payments and stationery control. A variety of classroom methods relevant to the teaching and learning of Elements of Office Administration (EOA) for the Normal pupils. Different methods of assessment for EOA.

### **POA513 Teaching Computing in Office Administration**

Various approaches and strategies appropriate to the teaching of computing to EOA pupils. Focus 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. Various subject topics like the nature and principles of computing; key developments and applications of word-processing, spreadsheet and computer graphics in the office. Hands-on practice on computers as well as micro-teaching sessions to develop skills in teaching computing to EOA pupils.

## The Teaching of English Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCE511	Language Teaching Approaches	Core	6	-
PCE512*	Language Study (Grammar)	Core	2	-
PCE513	English Language: Teaching Issues In Singapore Secondary Schools	Core	2	-

\* For those who have no background in language studies at undergraduate level

### **PCE511 Language Teaching Approaches**

Listening, speaking, reading and writing processes. Insights into present classroom teaching approaches. Grammar and vocabulary learning problems. A range of methods to develop language proficiency. Ways of adapting textbooks, selecting and exploiting materials, devising tasks and activities to maximise pupil learning and participation. Practical unit and lesson planning for actual teaching sessions with groups of remedial pupils in Singapore secondary schools. The development of trainee teachers' ability to reflect upon and adapt their teaching approaches to suit learner needs.

### **PCE512 Language Study (Grammar)**

Understanding the language requirements of the Singapore secondary school syllabus. How to analyse, evaluate and remedy problems in pupil work more effectively.

## **PCE513 English Language: Teaching Issues in Singapore Secondary Schools**

Consolidation of trainee teachers' knowledge and perceptions of language teaching in a range of school contexts (building on PCE511).

## The Teaching of English Literature

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCR511	Teaching Literature: Aims and Approaches	Core	6	-
PCR512	Writing about Literature and Literature Assessment	Core	2	-
PCR 513*	Approaches to Literature	Core	2	-

\*For those who have no background in language at undergraduate level

### **PCR511 Teaching Literature: Aims and Approaches**

The aims of literature teaching, specific objectives in the classroom, the literature teaching situation in respect of the local context, prescribed texts and syllabuses, and general methodology. Considerations of official directives including National Education and IT initiatives in literature teaching. Techniques for teaching the short story, novel, drama and poetry for literary development and creative and critical thinking. Micro-teaching to help improve student skills before teaching practice.

### **PCR512 Writing about Literature and Literature Assessment**

Developing and linking writing tasks for literature appreciation and criticism. Examining the connection between teaching and assessment goals by looking at the principles and practice of literature assessment at the secondary and junior college levels. Applying these principles to the setting and critiquing of literature tests.

## **PCR513 Approaches to Literature**

Introduction to literary analysis of texts in the three major literary forms – narrative, poetry and drama.

Elements of textual analysis and literary terminology will be emphasised.

## The Teaching of Geography

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCG511	Approaches to the Teaching and Assessment of Geography	Core	4	-
PCG512	Resources in Geography Teaching	Core	2	-
PCG514#	Teaching Social Studies to Secondary Students	Core	2	-
PCL514*	Themes in Secondary Social Studies	Core	2	-

**Note: # For those offering CS Geography but not CS History.**

**\* For those Offering CS Geography and CS History.**

### **PCG511 Approaches to the Teaching and Assessment of Geography**

An introduction to different modes of teaching geography ranging from expository teaching to the use of poetry, songs, drama and information technology in classrooms and field. The teaching of creative thinking and national education in the Geography syllabus. The design of different modes of assessment to evaluate learning outcomes.

### **PCG512 Resources in Geography Teaching**

The wide range of resources such as maps, models, photographs and computer software and courseware that might be used to enhance the teaching and learning of geography.

## **PCG514 Teaching Social Studies to Secondary Students**

This module will explore the nature and scope of teaching Social Studies at secondary level. A variety of methods relevant to the teaching and learning of Social Studies will be demonstrated. It will include the setting and marking of source-based and structured essay questions.

## **PCL514 Themes in Secondary Social Studies**

(for trainee teachers offering both History *and* Geography as their Curriculum Studies subjects)

Provision of the opportunity to do independent research on a theme in the Secondary Social Studies Syllabus. Exploration of the major issues relevant to the theme in terms of its content and pedagogical concerns. A practicum-based project may be used to apply and reinforce ideas on the theme researched.

## The Teaching of Lower Secondary Geography

This subject is offered to student teachers who did not study Geography at university level but who possess at least grade 'B' in Geography at 'A' level. These trainee teachers would offer a content module PCG521 in addition to pedagogical modules PCG511 to PCL514 offered by other PGDE(Secondary) students with Geography at university level.

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCG511	Approaches to the Teaching and Assessment of Geography	Core	4	-
PCG512	Resources in Geography Teaching	Core	2	-
PCG514#	Teaching Social Studies to Secondary Students	Core	2	-
PCL514*	Themes in Secondary Social Studies	Core	2	-
PCG521	Introduction to Geography	Core	2	-

**Note:** # For those offering CS Lower Secondary Geography but not CS History.

\* For those offering CS Lower Secondary Geography and CS History.

### PCG511 Approaches to the Teaching and Assessment of Geography

An introduction to different modes of teaching geography ranging from expository teaching to the use of poetry, songs, drama and information technology in classrooms and field. The teaching of creative thinking and national education in the Geography syllabus. The design of different modes of assessment to evaluate learning outcomes.

### PCG512 Resources in Geography Teaching

The wide range of resources such as maps, models, photographs and computer software and courseware

that might be used to enhance the teaching and learning of geography.

### **PCG514 Teaching Social Studies to Secondary Students**

This module will explore the nature and scope of teaching Social Studies at secondary level. A variety of methods relevant to the teaching and learning of Social Studies will be demonstrated. It will include the setting and marking of source-based and structured essay questions

### **PCL514 Themes in Secondary Social Studies** (for trainee teachers offering both History *and* Geography as their Curriculum Studies subjects)

Provision of the opportunity to do independent research on a theme in the Secondary Social Studies Syllabus. Exploration of the major issues relevant to the theme in terms of its content and pedagogical concerns. A practicum-based project may be used to apply and reinforce ideas on the theme researched.

### **PCG521 Introduction to Geography**

Three components of geography – physical geography, human geography and techniques. Knowledge of the lithosphere, biosphere and atmosphere and environmental problems in physical geography, spatial organisation of society and human activities in human geography. Techniques of map analysis and interpretation.

## Guidance and Counselling

This subject is offered in lieu of a teaching subject.

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCW511	Introduction to Pastoral Care and Career Guidance	Core	2	-
PCW512	Basic Skills in Pastoral Groupwork	Core	2	-
PCW513	Basic Skills in Pastoral Casework	Core	2	-
PCW514	Career Guidance in Schools	Core	2	-

### **PCW511 Introduction to Pastoral Care and Career Guidance**

The concept of Pastoral Care and Career Guidance in schools, with emphasis on the whole-school approach. The developmental guidance skills necessary to create a conducive learning environment in the school, to foster interaction and communication in the classroom, to enhance the self esteem of pupils and foster their personal and social development.

### **PCW512 Basic Skills in Pastoral Groupwork**

The group guidance aspect of Pastoral Care and Career Guidance. An overview of group processes and group theories, techniques in group guidance, decision-making, problem-solving and conflict-resolution in groups, and hands-on activities to develop group guidance skills.

### **PCW513 Basic Skills in Pastoral Casework**

The necessary knowledge and counselling skills to identify and help pupils with learning difficulties and personal problems. An overview of cognitive, affective and behavioural theories in counselling, their related approaches and intervention strategies with special reference to stress management and the handling of behavioural problems in schools.

### **PCW514 Career Guidance in Schools**

The importance of bridging the gap between the school and the world of work through the planning and implementation of a suitable career guidance programme in schools. Theories in career development, the role of the school in providing career guidance, approaches and techniques in career guidance and issues in career guidance.

## The Teaching of History

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCH513	Teaching of Secondary History and Social Studies	Core	4	-
PCH515	Teaching of Secondary History and Social Studies through Fieldtrips	Core	2	-
PCH516	Assessment and Evaluation in Secondary History and Social Studies	Core	2	-
PCL 514*	Themes in Secondary Social Studies	Core	2	-

**Note:** \* For those offering CS History and CS Geography.

### **PCH513 Teaching of Secondary History and Social Studies**

Various strategies in the teaching of history and social studies. Syllabus for the teaching of Social Studies to Normal Technical students at the lower secondary level. Expose trainee teachers to create strategies such as the use of role-play, simulation and the effective use of sources in lessons and information technology. Emphasis on the infusion of creative and critical thinking skills.

### **PCH515 Teaching of Secondary History and Social Studies through Fieldtrips**

Teaching trainee teachers to plan and conduct fieldtrips to selected sites in Singapore. Through fieldtrips, trainee teachers will gain important nuggets of information about their society and heritage.

## **PCH516 Assessment and Evaluation in Secondary History and Social Studies**

Trainee teachers will be taught how to interpret sources and use them effectively in assessment. The setting and marking of source-based questions and structured essay questions for History and Social Studies. Other forms of assessment and evaluation such as in Project Work and IT-based projects.

## **PCL 514 Themes in Secondary Social Studies**

*(For trainee teachers offering both History and Geography as their Curriculum Studies subject)*

Provision of the opportunity to do independent research on a theme in the Secondary Social Studies Syllabus. Exploration of the major issues relevant to the theme in terms of its content and pedagogical concerns. A practicum-based project may be used to apply and reinforce ideas on the theme researched.

## The Teaching of Lower Secondary History

This subject is offered to trainee teachers who did not study History at university level but who possess at least grade 'B' in History at 'A' level. These trainee teachers would offer a content module PCH521 in addition to pedagogical modules PCH513 to PCL514 offered by other PGDE(Secondary) trainee teachers with History at university level.

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCH513	Teaching of Secondary History and Social Studies	Core	4	-
PCH515	Teaching of Secondary History and Social Studies through Fieldtrips	Core	2	-
PCH516	Assessment and Evaluation in Secondary History and Social Studies	Core	2	-
PCL514*	Themes in Secondary Social Studies	Core	2	-
PCH521	Teaching of Lower Secondary History Content	Core	2	-

**Note:** \* For those offering CS Lower Secondary History and CS Geography.

### PCH513 Teaching of Secondary History and Social Studies

This module is designed to equip trainee teachers with various strategies in the teaching of history and social studies. It will also cover the syllabus for the teaching of Social Studies to Normal Technical students at the lower secondary level. This module will expose trainee teachers to create strategies such as the use of role-play, simulation and the effective use of sources in lessons and information technology. Emphasis will be given to the infusion of creative and critical thinking skills.

### **PCH515 Teaching of Secondary History and Social Studies through Fieldtrips**

This module is aimed at teaching trainee teachers to plan and conduct fieldtrips to selected sites in Singapore. Through fieldtrips, trainee teachers will gain important nuggets of information about their society and heritage.

### **PCH516 Assessment and Evaluation in Secondary History and Social Studies**

Trainee teachers will be taught how to interpret sources and use them effectively in assessment. The module will include the setting and marking of source-based questions and structured essay questions for History and Social Studies. Other forms of assessment and evaluation such as in Project Work and IT-based projects will be explored.

### **PCL 514 Themes in Secondary Social Studies**

*(For trainee teachers offering both History and Geography as their Curriculum Studies subject)*

Provision of the opportunity to do independent research on a theme in the Secondary Social Studies Syllabus. Exploration of the major issues relevant to the theme in terms of its content and pedagogical concerns. A practicum-based project may be used to apply and reinforce ideas on the theme researched.

## **PCH521 Teaching of Lower Secondary History Content**

The significant achievements of Southeast Asian, Indian and Chinese civilisations: the rise and growth of maritime kingdoms in Southeast Asia, the Indus Valley civilisation, the Mauryan and Gupta periods in India, the Shang civilisation in China, and the achievements of the Chin, Han and Tang dynasties. The social, economic and political history of Singapore from 1819 to 1965: the story of Temasek in the 14th century and the founding of modern Singapore in 1819, the social and economic development of the British colony in the 19th and early 20th centuries, the Japanese invasion and occupation of Singapore, the postwar economic and social reconstruction and the political events leading to the creation of an independent city-state in August 1965.

## The Teaching of Home Economics

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCX511	Home Economics Curriculum and Evaluation	Core	2	-
PCX512	The Teaching of Food and Nutrition	Core	2	-
PCX513	The Teaching of Clothing and Textiles	Core	2	-
PCX514	The Teaching of Family and Consumer Education	Core	2	-

### **PCX511 Home Economics Curriculum and Evaluation**

The nature, history and philosophy of home economics; the rationale and objectives of teaching home economics; resources and teaching strategies which focus on learner involvement; the use of appropriate evaluation procedures in facilitating effective learning.

### **PCX512 The Teaching of Food and Nutrition**

The Food and Nutrition syllabus at the secondary level; strategies and methods to teach basic principles of food preparation; organisation of investigative and practical work, and safety in the food laboratory.

### **PCX513 The Teaching of Clothing and Textiles**

The pedagogical aspects of topics such as textile studies, planning of clothing needs of individuals and families, consumer awareness in the choice and care of clothes, choice, use and care of equipment, and skills in clothing construction.

## **PCX514 The Teaching of Family and Consumer Education**

Various approaches to the teaching of consumer education. The concepts of needs and wants, as well as how to make smart consumer decisions, to identify priorities, to set realistic economic goals and manage resources effectively.

## The Teaching of Malay Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCD510	Teaching of Malay Language 1	Core	5	-
PCD511	Teaching of Malay Language 2	Core	3	-

### PCD510 Teaching of Malay Language 1

A theoretical and practical understanding of the Malay Language curriculum in secondary school: its contents, development and implementation, and the design, selection and integration of appropriate media and materials in the teaching of the language at secondary level. The various approaches and methods to language acquisition and learning. The reading process, developing skills in reading. Understanding of the writing process, the various types of writing, the levels of writing skills and the evaluation of writing skills. Oral and speaking skills. The teaching of listening and speaking.

### PCD511 Teaching of Malay Language 2

The process of vocabulary acquisition and development, teaching and learning strategies including the teaching of Malay proverbs. The use of computer and IT-based materials in the teaching of Malay language. Testing, the construction and administration of test items, item review and analysis, discrete item test and integrative tests, and developing Malay language test and materials for the secondary level.

## The Teaching of Malay Literature

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCJ513	Teaching of Malay Literature 1	Core	6	-
PCJ514	Teaching of Malay Literature 2	Core	2	-

### PCJ513 Teaching of Malay Literature 1

The aims and objectives of teaching literature and the place of literature in curriculum. An overview of developments of modern Malay and Indonesian literature. The general methods and techniques of teaching literature. The knowledge and skills of teaching modern Malay and Indonesian novel, short story, poetry and drama/play at secondary schools. Evaluation and testing of modern literature.

### PCJ514 Teaching of Malay Literature 2

An overview of the main features and developments of traditional Malay literature. The knowledge and skills of the teaching of traditional Malay prose and poetry. The principles, methods and techniques of the teaching of selected classical genres and texts. Appreciation, evaluation and testing of traditional Malay literature.

## The Teaching of Mathematics

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCM513	Teaching and Learning of Mathematics I	Core	6	-
PCM514	Teaching and Learning of Mathematics II	Core	2	-

### PCM513 Teaching and Learning of Mathematics I

Aims and objectives of mathematics education, Mathematics curriculum in Singapore, concept formation and learning theories in mathematics, teaching approaches and classroom organisation, lesson planning, mathematics communication and metacognition, mathematical thinking and problem solving, technology in mathematics education. Teaching and learning of mathematics topics: Arithmetic, Mensuration and Geometry, Functions and Graphs, Statistics, Algebra, Trigonometry, Calculus, Probability, Sets, Matrices, Vectors, and Mechanics. Understanding of concepts in the topics, curriculum structure, learning difficulties, teaching approaches, motivation techniques for each of the topics will be dealt with. Hands-on sessions on the use of IT to teach mathematics.

### PCM514 Teaching and Learning of Mathematics II

Assessment in mathematics, test construction and marking. Project work and enrichment in mathematics at the secondary level. Classroom presentations of teaching ideas or practice of teaching skills, which will be critiqued by the tutor and fellow trainee teachers.

## The Teaching of Lower Secondary Mathematics

This subject is offered to trainee teachers who did not study Mathematics at university level but who possess at least grade 'B' in Mathematics C or Further Mathematics at 'A' level.

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCM521	Principles and Practice of Teaching Lower Secondary Mathematics I	Core	6	-
PCM522	Principles and Practice of Teaching Lower Secondary Mathematics II	Core	2	-

### PCM521 Principles and Practice of Teaching Lower Secondary Mathematics I

Aims and objectives of mathematics education, Mathematics curriculum in Singapore, concept formation and learning theories in mathematics, teaching approaches and classroom organisation, unit and lesson planning, mathematics communication and metacognition, mathematical thinking and problem solving, and technology in mathematics education. Teaching and learning of the following mathematics topics (including understanding of concepts within and related to the topics, curriculum structure, learning difficulties, teaching approaches and motivation techniques): Arithmetic, Mensuration and Geometry, Trigonometry, Algebra, Statistics, Functions and Graphs. Hands-on sessions on the use of IT to teach mathematics.

## **PCM522 Principles and Practice of Teaching Lower Secondary Mathematics II**

Assessment in mathematics, test construction and marking. Project work and enrichment in lower secondary mathematics. Classroom presentations of teaching ideas or practice of teaching skills which will be critiqued by the tutors and peers.

## The Teaching of Music

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCI511	Principles and Foundations of Music Education	Core	5	-
PCI512	Making Music in the Secondary Classroom	Core	3	-

### **PCI511 Principles and Foundations of Music Education**

Overview of fundamental issues in contemporary music education and classroom practice, the aims and objectives of general music curriculum and syllabus for the music elective programme in Singapore. Examine and evaluate the psychological theories and pedagogical principles about the teaching and learning of music and the role of technology, ethnic music, and sociological issues in music education.

### **PCI512 Making Music in the Secondary Classroom**

The repertoire of materials available for classroom use at secondary level. Methodologies to deliver a modern singing and instrumental curriculum; the ways in which classroom listening and composing activities are employed to promote music education through the acquisition of skills and involvement in a variety of musical experiences. Issues in the planning and evaluation of lessons.

## The Teaching of Physics

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCP511	Teaching of Physics I	Core	2	-
PCP512	Teaching of Physics II	Core	4	-
PCP513	Teaching of Physics III	Core	2	-

### PCP511 Teaching of Physics I

An understanding of school pupils: 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. Dealing with critical incidents. Lectures on showmanship, creativity, thinking, inquiry, telling and explaining.

### PCP512 Teaching of Physics II

Comparing the present Physics curriculum with Physics curricula developed and implemented in other countries. The planning of physics lessons for maximum impact, the syllabus, curriculum materials and teaching strategies for pupils of different abilities. Remedial and enrichment programmes; research-based findings concerning alternative conceptions, difficulties and problems in various physics topics. Various approaches that facilitate the teaching, learning of physics: discover-inquiry learning, learning cycle, use of worksheets and discussions, individualised instruction, computer-assisted learning and classroom demonstrations. Infusion of the three initiatives namely, IT, Thinking skills and National Education into the teaching of physics.

### **PCP513 Teaching of Physics III**

Two important areas of Physics teaching, that of resource management and evaluation. Resources available to the classroom teacher, both within and outside the school. Safety in science laboratories, the role of practical work and its importance as an integral aspect of physics education. Evaluation and feedback on teaching efforts. Lectures on the setting, marking and analysing of examination papers for feedback to pupils.

## The Teaching of Tamil Language

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCT511	Teaching of Tamil Language 1	Core	5	-
PCT512	Teaching of Tamil Language 2	Core	3	-

### **PCT511 Teaching of Tamil Language 1**

The curriculum and methodology of teaching Tamil Language in secondary schools. The four language skills namely listening, speaking, reading and writing at the secondary level. The objectives, content and various approaches to teaching and testing the four skills. Integration of thinking skills in teaching of the above four skills. Use of IT in teaching of Tamil Language.

### **PCT512 Teaching of Tamil Language 2**

Two parts: the teaching of vocabulary and grammar, and language testing. The teaching of grammar and vocabulary at secondary level. A study of the functional aspects of Tamil grammar and various methods of teaching Tamil grammar and vocabulary. The principles of testing in Tamil language, definition and types of language tests, objectives of language testing, the principles of planning a language test and evaluation of performance in a test paper. High and low order thinking skills in testing.

## The Teaching of Tamil Literature

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCJ515	Teaching of Tamil Literature 1	Core	5	-
PCJ516	Teaching of Tamil Literature 2	Core	3	-

### **PCJ515 Teaching of Tamil Literature 1**

An introduction to the teaching of Tamil language through the use of literature. The use of Tamil drama and various aspects of ancient, medieval and modern poetry such as explanation and presentation of dramatic situations in poems, description of images, mood and attitudes, tone, analogical language, theme and meaning. Various aspects of National Education in Tamil Poetry and their importance in teaching of Tamil language at secondary level.

### **PCJ516 Teaching of Tamil Literature 2**

The teaching of Tamil language through the study of novels, short stories and essays. Various kinds of Tamil short stories and novels and the techniques used by writers. Various aspects of National Education in Tamil fiction and their importance in teaching of Tamil language at secondary level.

## PRACTICUM

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PPR511❖	Practicum	Core	0	-

- ❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

### PPR511 Practicum

The Practicum is a very important part of the PGDE (Secondary) programme. Its principal function is to provide the trainee teachers with the opportunity to use knowledge and skills introduced in the Education Studies and Curriculum Studies courses and attempt to integrate theory into practice, and to develop teaching competencies in a variety of instructional contexts, and at different levels through close developmental supervision. They will learn from experienced cooperating teachers about the schooling process, and prepare themselves for their roles and responsibilities in teaching.

The Practicum is spread throughout the entire course of study. For the first semester, the trainee teachers will enjoy some school experience in secondary classes so that they can observe at first hand how teachers teach and students learn. During the second semester, trainee teachers will be sent out to schools for their teaching practice. They will be given the opportunity to teach their subjects of specialisation to students of different abilities at the upper and lower secondary levels.

## LANGUAGE ENRICHMENT AND ACADEMIC DISCOURSE SKILLS

Trainee teachers doing Teaching of Chinese Language will do PCU514/5. Trainee teachers doing Teaching of Malay Language will do PCU516/7 while trainee teachers doing Teaching of Tamil Language will do PCU518/9.

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PCU511☒	Use of English in Teaching	Core	0	-
PCU514	Use of Chinese in Teaching 1	Core	1	-
PCU515	Use of Chinese in Teaching 2	Core	1	-
PCU516	Use of Malay in Teaching 1	Core	1	-
PCU517	Use of Malay in Teaching 2	Core	1	-
PCU518	Use of Tamil in Teaching 1	Core	1	-
PCU519	Use of Tamil in Teaching 2	Core	1	-

☒ This module is offered on a Pass/Fail basis. A Pass is required in order to fulfil programme requirements.

### Use of English in Teaching

#### PCU511 Use of English in Teaching

An oral communication course designed to improve the ability of trainee teachers to be more effective as communicators in the classroom. Various aspects of language communication commonly employed in the classroom and the modalities used to effect such communication. Aspects of speech, voice projection and modulation, effective techniques of reading text aloud, oral presentations and various modes of classroom talk.

## **Use of Chinese in Teaching**

### **PCU514 Use of Chinese in Teaching 1**

Development of the oral communication skills of student teachers. Three main sections: Phonetics, Speech Skills and Effective Classroom Communication. Errors in Mandarin pronunciation with regard to vowels and consonants, the four tones and the change of tone with specific words.

### **PCU515 Use of Chinese in Teaching 2**

How to be more effective in the use of Mandarin for the teaching of Chinese. Practical knowledge and skills in Hanyu Pinyin, accurate pronunciation and standard Mandarin. The application of speech skills in the classroom situation.

## **Use of Malay in Teaching**

### **PCU516 Use of Malay in Teaching 1**

Development of communicative proficiency in the use of Malay in secondary school. Accuracy and mastery in pronunciation, including the new pronunciation system (Sebutan Baku) and communication skills inside and outside the classroom. Reading aloud, spontaneous dialogue, giving instructions, questioning techniques, explaining concepts, lecturing, debating skills.

### **PCU517 Use of Malay in Teaching 2**

Greater exposure and practice for trainee teachers to develop their proficiency and confidence as Malay language teachers in secondary school. Literacy in Jawi will be included.

### **Use of Tamil in Teaching**

#### **PCU518 Use of Tamil in Teaching 1**

Development of oral proficiency in Tamil language. Phonetics and mastery in pronunciation and other communication skills within the classroom.

#### **PCU519 Use of Tamil in Teaching 2**

Written communication skills. Common errors in writing and with Tamil syntax.

**PGDE PROGRAMME SPECIALISING IN TEACHING OF  
PHYSICAL EDUCATION AT PRIMARY LEVEL**

## CURRICULUM STRUCTURE

The curriculum structure of the PGDE (Teaching of Physical Education at Primary Level) programme is shown in Table 7 below :

**Table 7 : Curriculum Structure of the PGDE (Teaching of Physical Education at Primary Level) Programme  
Year 1**

Category/ Subject	Module Code	Title	No. of AUs
<b>EDUCATION STUDIES</b>			
	PED503	Instructional Technology	2
	PED504	Social Context of Teaching & Learning	2
	PED505	The Psychology of Pupil Development and the Learning Process	2
	PED506	Teaching & Classroom Management	2
<b>PHYSICAL EDUCATION</b>			
Physical Education	PPC501	Curriculum Gymnastics I	1
	PPC502	Track & Field	1
	PPC504	Outdoor Education	1
	PPC505	Instructional Strategies & Methods in Physical Education	2
	PPC506	Developmental Games for Primary Children	1
	PPC508	Residential Camp Experience	0
	PPC509	Swimming	1
<b>PHYSICAL EDUCATION</b>			
Physical Education	PPC530	Basketball	1
	PPC531	Netball	1
	PPC532	Soccer	1
	PPC533	Rugby	1
	PPC534	Hockey	1
<b>PHYSICAL EDUCATION</b>			
Physical Education	PPA501	Human Functional Anatomy	2
	PPA502	Health Education	2
	PPA503	Introduction to Physical Education and Sport	2
	PPA504	Physiology of Exercise, Health & Nutrition	2
	PPA505	Skill Acquisition	2
<b>LANGUAGE ENRICHMENT AND ACADEMIC DISCOURSE SKILLS</b>			
Use of English In Teaching	PCU501☒	Use of English in Teaching	0

☒ This module is offered on a Pass/Fail basis. The module must be passed in order to fulfil programme requirements.

## Year 2

Category/ Subject	Module Code	Title	No. of AUs
Physical Education	PPC600	Net/Striking Games for Primary School Children	1
	PPC601	Volleyball	1
	PPC602	Dance	1
	PPC603	Fitness and Conditioning	1
	PPC604	Badminton	1
	PPC605	Effective Teaching of Physical Education	2
	PPC606	Curriculum Gymnastics II	1
Physical Education	PPC630	Sepak Takraw	1
	PPC631	Boardsailing	1
	PPC632	Tennis	1
	PPC633	Table Tennis	1
	PPC634	Squash	1
	PPC635	Sailing	1
	PPC636	Advanced Gymnastics	1
	PPC637	Aerobics	1
	PPC638	Weight Training	1
	PPC639	Canoeing	1
PPC640	Softball	1	
English Language	PCE501	Integrating the Primary Language Arts : Teaching Reading and Writing	5
	PCE502	Developing Literacy through the Creative Arts	2
Mathematics	PCM505	Principles and Practice of Primary Mathematics	3
	PCM506	Fostering Mathematical Thinking	3
	PCM507	Assessment in Mathematics	2
Physical Education	PPA603	Social and Psychological Foundation of Physical Education and Sports	2
	PPA606	Biomechanics	2
	PPR601 ♦	Practicum	0

- ♦ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

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## **CONTENTS OF CORE MODULES AND PRESCRIBED ELECTIVES**

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### **EDUCATION STUDIES**

The modules for PED503-506 are described in pages 28-29.

### **CURRICULUM STUDIES**

#### **The Teaching of English Language**

The modules for this subject (PCE501-502) are described in page 45.

#### **The Teaching of Mathematics**

The modules for this subject (PCM505-507) are described in pages 48-49.

## Curriculum Studies: The Teaching of Physical Education

Year	Module Code	Title	Module Category	No. of AUs	Pre-requisites
1	PPC501	Curriculum Gymnastics I	Core	1	-
	PPC502	Track and Field	Core	1	-
	PPC504	Outdoor Education	Core	1	-
	PPC505	Instructional Strategies and Methods in Physical Education	Core	2	-
	PPC506	Developmental Games for Primary Children	Core	1	-
	PPC508	Residential Camp Experience	Core	0	-
	PPC509	Swimming	Core	1	-
	PPC530	Basketball	Prescribed	1	-
	PPC531	Netball	Prescribed	1	-
	PPC532	Soccer	Prescribed	1	-
	PPC533	Rugby	Prescribed	1	-
PPC534	Hockey	Prescribed	1	-	
2	PPC600	Net/Striking Games for Primary School Children	Core	1	-
	PPC601	Volleyball	Core	1	-
	PPC602	Dance	Core	1	-
	PPC603	Fitness and Conditioning	Core	1	-
	PPC604	Badminton	Core	1	-
	PPC605	Effective Teaching of Physical Education	Core	2	PPC505
	PPC606	Curriculum Gymnastics II	Core	1	PPC501
	PPC630	Sepak Takraw	Prescribed	1	-
	PPC631	Boardsailing	Prescribed	1	-
	PPC632	Tennis	Prescribed	1	-
	PPC633	Table Tennis	Prescribed	1	-
	PPC634	Squash	Prescribed	1	-
	PPC635	Sailing	Prescribed	1	-
	PPC636	Advanced Gymnastics	Prescribed	1	PPC606
	PPC637	Aerobics	Prescribed	1	-
	PPC638	Weight Training	Prescribed	1	-
	PPC639	Canoeing	Prescribed	1	-
PPC640	Softball	Prescribed	1	-	

### **PPC501 Curriculum Gymnastics I**

Instruction of educational gymnastics based on movement themes. A variety of teaching styles will be introduced such as problem solving and discovery techniques, to allow individuals and small groups to develop themes appropriate for both apparatus and floor work.

### **PPC502 Track and Field**

The basic mechanics of running, jumping and throwing in relation to the teaching of track and field events in the primary school.

### **PPC504 Outdoor Education**

Basic orienteering, campcraft, trust and co-operation games, problem solving skills and the organisation of school camps.

### **PPC505 Instructional Strategies and Methods in Physical Education**

The first of two pedagogical modules, this subject focuses on refining generic teaching skills (explanation, demonstration, and practice); planning and organising the content of physical education lessons and programmes for primary schools; principles of learning-environment and pupil management; modes of observation (providing feedback, correction and encouragement); games as an educational experience. Lectures, seminars, peer-and/or micro-teaching experiences as well as assignments constitute the instructional methods.

### **PPC506 Developmental Games for Primary Children**

The focus is on designing and modifying games appropriate for primary aged children. Fundamental games skills and understandings for lower primary and conditioned games for upper primary are emphasized. Practical inquiry-based practical sessions is the instructional mode.

### **PPC508 Residential Camp Experience**

This experience is an extension of the outdoor education module. Trainee Teachers will be exposed to an experiential, environmental, residential, learning experience. 'Hard' skills such as rock climbing and kayaking will be augmented with 'soft' skills such as debriefing and helping trainee teachers see the transference of outdoor/adventure learning to everyday settings. The educational potential of Adventure Education will be experienced and discussed, along with issues such as risk management and assessment.

### **PPC509 Swimming**

Swimming as an activity in the school curriculum. Focus on the four swimming strokes of frontcrawl, breaststroke, backstroke, and butterfly, as well as the underlying mechanical principles such as streamlining, propulsion, and resistance. Trainee teachers will also be taught the progressions in learning the four strokes, and basic water safety and confidence activities.

### **PPC530 Basketball**

Trainee Teachers will be introduced to the basic manipulative skills of a ball-handling game. Concepts such as ball possession, moving into space, attacking the basket and defending the ball will also be covered in this territorial invasion game.

### **PPC531 Netball**

The primary aim of this course is to introduce trainee teachers to the game of netball from a playing and teaching perspective. The module will cover the basic skills of footwork, ball skills, goal shooting, attacking and defending, and the application of these skills in game play. Basic court strategies will be developed through game play. The teaching of these skills, game analysis and basic umpiring skills will also be introduced.

### **PPC532 Soccer**

The foundation skills of soccer. How to introduce soccer in primary schools in an efficient, enjoyable way through small-sided and conditioned games.

### **PPC533 Rugby**

How to teach rugby in primary schools. The fun aspect of playing a running, handling game and the development of individual skill through the medium of non-contact/limited-contact structured games.

### **PPC534 Hockey**

The necessary skills and knowledge to teach hockey in a safe and enjoyable manner to primary school students. Basic skills of dribbling, passing, trapping, shooting will be covered. Offensive and defensive strategies and rules of the game will also be introduced.

### **PPC600 Net/Striking Games for Primary School Children**

An introduction to various net/barrier and striking/fielding games suitable for primary school children. Modified and lead-up activities to various formal games will be emphasised.

### **PPC601 Volleyball**

The content and method necessary to teach volleyball in primary schools. An activity-based course in which students will have the opportunity to progress in a variety of skill learning games.

### **PPC602 Dance**

Healthy living, fitness, nutrition, stress management and the use of alcohol, smoking and drugs and their inherent problems.

### **PPC603 Fitness and Conditioning**

How to teach Fitness and Conditioning in primary schools. The influence of the maturation process on the parameters of fitness. Strategies to promote the development of fitness through an integrated physical education programme.

### **PPC604 Badminton**

Badminton is a game that volleys a shuttlecock across a net with rackets. In this module trainee teachers will be exposed to a variety of methods in which primary school children could acquire the court movement skills, co-ordination skills and basic racket volleying skills. The aim of this module is to enable trainee teachers to acquire good racket volleying skills and the abilities to teach basic badminton to primary school children. [Practical]

### **PPC605 Effective Teaching of Physical Education**

This module, second in a series, builds on foundation pedagogical knowledge and skills for primary school students. It develops competence in a variety of teaching methods including inquiry, problem solving, group work and peer-teaching. A concept approach to teaching games in the upper primary school is emphasized. The focus is on planning, teaching and evaluating situationally relevant lessons. Trainee teachers refine their own teaching through systematic observation. Instructional strategies include lectures, seminars, peer- and/or micro-teaching and assignments.

## **PPC606 Curriculum Gymnastics II**

Development of the basic techniques already taught in the first course by exploring different themes on simple as well as complex apparatus designs. Aspects of partner work and rhythmic apparatus.

## **PPC630 Sepak Takraw**

The basics of sepak takraw as a class activity in schools will be introduced in this module. Emphasis will be on service, spiking, offensive and defensive strategies, rules and umpiring skills relevant to the primary schools.

## **PPC631 Boardsailing**

For students with little or no previous experience. How to sail competently on all points of sail.

## **PPC632 Tennis**

This module is designed to assist trainee teachers develop their basic tennis skills so that they are able to teach the game to beginners. Contents covered include forehand and backhand groundstrokes, serves, volleys, lobs, drops, overheads, tactics and strategies, and rules and etiquette of the game.

### **PPC633 Table Tennis**

The basic techniques and tactics. Grip; use of spin; service; rallying; mobility; rules and scoring; management of tournaments and competitions.

### **PPC634 Squash**

This introductory course will provide trainee teachers with the basic skills and knowledge to play competitive squash. Skills taught include drives, boasts, drops, lobs, overheads and serves. Trainee teachers will also learn to referee and mark the games and be acquainted with the safety issues in the game of squash.

### **PPC635 Sailing**

An introductory course in dinghy sailing where terminology in sailing, knots, parts of a dinghy, and safety aspects of sailing will be introduced. Knowledge and skills of launching and recovery, the main points of sail and basic right of way rules will be covered.

### **PPC636 Advanced Gymnastics**

Personal performance and advanced skills on floor and selected apparatus.

### **PPC637 Aerobics**

Trainee teachers will gain an understanding of the components and training principles involved in a group aerobic exercise class in order to teach a safe and effective group exercise session in schools. Types of low and high impact activity, group leadership, routine choreography, and resistance training programming will be covered.

### **PPC638 Weight Training**

Weight (resistance) training techniques, terminology and methods. Safety procedures related to the use of both fixed equipment and free weights. The principles of specificity, overload, adaptation and overload relating to strength training, endurance training, power training and circuit training. Basic physiology is introduced.

### **PPC639 Canoeing**

An introductory course in basic canoeing skills and capsize (rescue) drills. Fun and challenging canoeing games and activities will be introduced to enable trainee teachers to both learn and teach skills to their students. Practical experiences with canoeing, both in the swimming pool and open sea, will be provided.

## **PPC640 Softball**

Basic techniques: overarm throwing, catching, underhand pitching, hitting and running bases. Application of rules of the game with special safety concerns. Basic tactics such as advancing a runner and co-ordinating defensive play. Learning experiences in drills and simulated game situations in small groups and full game-playing scenarios.

## ACADEMIC SUBJECT

### Physical Education

Year	Module Code	Title	Module Category	No. of AUs	Pre-requisites
1	PPA501	Human Functional Anatomy	Core	2	-
	PPA502	Health Education	Core	2	-
	PPA503	Introduction to Physical Education & Sport	Core	2	-
	PPA504	Physiology of Exercise, Health and Nutrition	Core	2	PPA501
	PPA505	Skill Acquisition	Core	2	-
2	PPA603	Social and Psychological Foundation of Physical Education and Sports	Core	2	-
	PPA606	Biomechanics	Core	2	-

#### PPA501 Human Functional Anatomy

Variation in the form and structure of the body and how this affects physical performance. Anatomical terminology of the various systems of the body. Relevance of the Skeletal, Nervous, Cardiovascular, Respiratory and muscular systems to physical education and sports.

#### PPA502 Health Education

Healthy living, fitness, nutrition, stress management and the use of alcohol, smoking and drugs and their inherent problems.

### **PPA503 Introduction to Physical Education and Sport**

A course emphasising concepts related to the broad field of physical education and sport. It provides an overview of the disciplines that study the field's philosophical, historical, cultural, and scientific foundations and its application in the field. Examines the structure of national sport organisations and their relationships to promoting participation in sports from the recreational to high performance levels. The daily work in physical education and sport, the traditional field of teaching and coaching are highlighted. Current issues and future directions in the field for the twenty-first century are also explored.

### **PPA504 Physiology of Exercise, Health and Nutrition**

Aspects of exercise physiology that are most relevant to the Physical Education teacher in Singapore, namely, thermoregulation in children and adolescents; children and physical performance and the energy systems; the physiological adaptations that occur with physical training. The Cardiorespiratory System in Health and Disease.

### **PPA505 Skill Acquisition**

Introductory studies on the relevance of selected areas to the processes of learning and performing motor skills. The individual as a complex organism which operates under varied environmental conditions. Particular reference to learning theories, motor control, practice conditions, transfer of learning, memory and retention.

### **PPA603 Social and Psychological Foundation of Physical Education and Sports**

This module introduces the social psychology of physical activity with particular reference to the dynamics of personal and situational interaction in sport and exercise settings. Specifically, the module will examine issues and theories of motivation, arousal and anxiety, personality, competition and co-operation, team dynamics, aggression, and moral development.

### **PPA606 Biomechanics**

The fundamental mechanical concepts and principles which govern human movement will be discussed in detail. The effect of internal and external forces which act on the human body during movement will be analysed.

## PRACTICUM

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PPR601❖	Practicum	Core	0	-

- ❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

### PPR601 Practicum

The main objective of the Practicum is to provide trainee teachers with an opportunity to link the theory of teaching with the practice of teaching as well as to develop competence in classroom teaching. During the Practicum, the trainee teacher will also reflect on the skills of planning, managing, organising and evaluating their lessons in physical education.

## LANGUAGE ENRICHMENT AND ACADEMIC DISCOURSE SKILLS

### Use of English in Teaching

The module for this subject (PCU501) is described in page 62.

**PGDE PROGRAMME SPECIALISING IN TEACHING OF  
PHYSICAL EDUCATION AT SECONDARY LEVEL**

## CURRICULUM STRUCTURE

The curriculum structure of the PGDE (Teaching of Physical Education at Secondary Level) programme is shown in Table 8 below:

**Table 8 : Curriculum Structure of the PGDE (Teaching of Physical Education at Secondary Level) Programme**

### *Year 1*

Category/ Subject	Module Code	Title	No. of AUs
	PED513	Instructional Technology	2
	PED514	Social Context of Teaching & Learning	2
	PED515	The Psychology of Pupil Development and the Learning Process	2
	PED516	Teaching & Classroom Management	2
Physical Education	PPC510	Curriculum Gymnastics I	1
	PPC512	Track & Field	1
	PPC514	Outdoor Education	1
	PPC515	Instructional Strategies & Methods in Physical Education	2
	PPC516	Principles of Secondary Games	1
	PPC518	Residential Camp Experience	0
	PPC519	Swimming	1
Physical Education	PPC551	Netball	1
	PPC552	Soccer	1
	PPC553	Rugby	1
	PPC554	Hockey	1

cont'd

Category/ Subject	Module Code	Title	No. of AUs
Physical Education	PPA510	Human Functional Anatomy	2
	PPA511	Introduction to Physical Education & Sport	2
	PPA512	Health Education	2
	PPA514	Physiology of Exercise, Health & Nutrition	2
	PPA515	Skill Acquisition	2
Use of English in Teaching	PCU511☒	Use of English in Teaching	0

- ☒ This module is offered on a Pass/Fail basis. A Pass is required in order to fulfil the programme requirements.

## Year 2

Category/ Subject	Module Code	Title	No. of AUs
<b>CURRICULUM STUDIES</b>			
Physical Education	PPC610	Volleyball	1
	PPC611	Dance	1
	PPC612	Fitness and Conditioning	1
	PPC613	Badminton	1
	PPC615	Effective Teaching of Physical Education	2
	PPC616	Curriculum Gymnastics II	1
	PPC620	Basketball	1
<b>CURRICULUM STUDIES</b>			
Physical Education	PPC650	Sepak Takraw	1
	PPC651	Boardsailing	1
	PPC652	Tennis	1
	PPC653	Table Tennis	1
	PPC654	Squash	1
	PPC655	Sailing	1
	PPC656	Advanced Gymnastics	1
	PPC657	Aerobics	1
	PPC658	Weight Training	1
	PPC659	Canoeing	1
	PPC660	Softball	1
<b>CURRICULUM STUDIES</b>			
		Arts/Science Curriculum Studies subjects	8
<b>CURRICULUM STUDIES</b>			
Physical Education	PPA613	Social and Psychological Foundation of Physical Education and Sports	2
	PPA616	Biomechanics	2
<b>CURRICULUM STUDIES</b>			
	PPR611	Practicum	0

- ❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

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## **CONTENTS OF CORE MODULES AND PRESCRIBED ELECTIVES**

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### **EDUCATION STUDIES**

The modules for PED513-516 are described in pages 75-76.

### **CURRICULUM STUDIES**

#### **The Teaching of ...**

Descriptions of modules for Arts/Science Curriculum Studies subjects are available in pages 90-134.

## Curriculum Studies: The Teaching of Physical Education

Year	Module Code	Title	Module Category	No. of AUs	Pre-requisites
1	PPC510	Curriculum Gymnastics I	Core	1	-
	PPC512	Track and Field	Core	1	-
	PPC514	Outdoor Education	Core	1	-
	PPC515	Instructional Strategies and Methods in Physical Education	Core	2	-
	PPC516	Principles of Secondary Games	Core	1	-
	PPC518	Residential Camp Experience	Core	0	-
	PPC519	Swimming	Core	1	-
	PPC551	Netball	Prescribed	1	-
	PPC552	Soccer	Prescribed	1	-
	PPC553	Rugby	Prescribed	1	-
PPC554	Hockey	Prescribed	1	-	
2	PPC610	Volleyball	Core	1	-
	PPC611	Dance	Core	1	-
	PPC612	Fitness and Conditioning	Core	1	-
	PPC613	Badminton	Core	1	-
	PPC615	Effective Teaching of Physical Education	Core	2	PPC515
	PPC616	Curriculum Gymnastics II	Core	1	PPC510
	PPC620	Basketball	Core	1	-
	PPC650	Sepak Takraw	Prescribed	1	-
	PPC651	Boardsailing	Prescribed	1	-
	PPC652	Tennis	Prescribed	1	-
	PPC653	Table Tennis	Prescribed	1	-
	PPC654	Squash	Prescribed	1	-
	PPC655	Sailing	Prescribed	1	-
	PPC656	Advanced Gymnastics	Prescribed	1	PPC616
	PPC657	Aerobics	Prescribed	1	-
	PPC658	Weight Training	Prescribed	1	-
	PPC659	Canoeing	Prescribed	1	-
PPC660	Softball	Prescribed	1	-	

### **PPC510 Curriculum Gymnastics I**

Instruction of educational gymnastics based on movement themes. A variety of teaching styles will be introduced such as problem solving and discovery techniques, to allow individuals and small groups to develop themes appropriate for both apparatus and floor work.

### **PPC512 Track and Field**

The basic mechanics of running, jumping and throwing in relation to the teaching of track and field events in the secondary school.

### **PPC514 Outdoor Education**

Basic orienteering, campcraft, trust and co-operation games, problem solving skills and the organisation of school camps.

### **PPC515 Instructional Strategies and Methods in Physical Education**

The first of two pedagogical modules, this subject focuses on refining generic teaching skills (explanation, demonstration, and practice); planning and organising the content of physical education lessons and programmes for secondary schools; principles of learning-environment and pupil management; modes of observation (providing feedback, correction and encouragement). Lectures, seminars, peer- and micro-teaching experiences as

well as assignments constitute the instructional methods.

### **PPC516 Principles of Secondary Games**

The nature of games. An analytical approach to the teaching of games with emphasis on underlying concepts of territorial-invasion, net-barrier, and striking-fielding games and the role of modified rules, space, and equipment in designing situational games.

### **PPC518 Residential Camp Experience**

This experience is an extension of the outdoor education module. Trainee teachers will be exposed to an experiential, environmental, residential, learning experience. 'Hard' skills such as rock climbing and kayaking will be augmented with 'soft' skills such as debriefing and helping trainee teachers see the transference of outdoor/adventure learning to everyday settings. The educational potential of Adventure Education will be experienced and discussed, along with issues such as risk management and assessment.

### **PPC519 Swimming**

This module introduces swimming as an activity in the school curriculum. The module will focus on the four swimming strokes of frontcrawl, breaststroke, backstroke, and butterfly, as well as the underlying mechanical principles such as streamlining, propulsion, and resistance. Trainee teachers will also be taught the progressions in learning the four

strokes, and basic water safety and confidence activities.

### **PPC551 Netball**

The primary aim of this course is to introduce trainee teachers to the game of netball from a playing and teaching perspective. The module will cover the basic skills of footwork, ball skills, goal shooting, attacking and defending, and the application of these skills in game play. Basic court strategies will be developed through game play. The teaching of these skills, game analysis and basic umpiring skills will also be introduced.

### **PPC552 Soccer**

The foundation skills of soccer. How to introduce soccer in secondary schools in an efficient, enjoyable way through small-sided and conditioned games.

### **PPC553 Rugby**

How to teach rugby in secondary schools. The fun aspect of playing a running, handling game and the development of individual skill through the medium of non-contact/limited-contact structured games.

### **PPC554 Hockey**

The module aims to provide trainee teachers with the necessary skills and knowledge to teach hockey in a safe and effective manner to secondary school

students. Skills of dribbling, passing, trapping, shooting will be covered. Offensive and defensive strategies, rules of the game, and simple umpiring skills will also be introduced.

### **PPC610 Volleyball**

The content and method necessary to teach volleyball in secondary schools. An activity-based course in which trainee teachers will have the opportunity to progress in a variety of skill learning games.

### **PPC611 Dance**

Teaching methods and resource for the planning and instruction of folk dances in the secondary school curriculum. Trainee teachers will learn dances from different cultures reflecting a variety of styles and techniques.

### **PPC612 Fitness and Conditioning**

How to teach Fitness and Conditioning in secondary schools. The influence of the maturation process on the parameters of fitness. Strategies to promote the development of fitness through an integrated physical education programme.

### **PPC613 Badminton**

Badminton is a game that volleys a shuttlecock across a net with rackets. In this module trainee teachers will be exposed to a variety of methods in

which beginners can acquire the basic skills and tactics involved in the game. The aim of this module is to enable trainee teachers to understand the nature of the game and to teach the game to beginners [Practical]

### **PPC615 Effective Teaching of Physical Education**

This module, second in a series, builds on foundation pedagogical knowledge and skills appropriate for secondary school students. It develops competence in a variety of teaching methods including inquiry, problem solving, group work and peer-teaching. A concept approach to teaching games is emphasized. The focus is on planning, teaching and evaluating situationally relevant lessons. Trainee teachers refine their own teaching through systematic observation. Instructional strategies include lectures, seminars, peer- and/or micro-teaching and assignments.

### **PPC616 Curriculum Gymnastics II**

Development of the basic techniques already taught in the first course by exploring different themes on simple as well as complex apparatus designs. Aspects of partner work and rhythmic apparatus.

### **PPC620 Basketball**

Trainee teachers will be introduced to the basic skills of a ball-handling game. Concepts such as ball possession, moving into space, attacking the basket and defending the ball will also be covered in this

territorial invasion game. More advanced strategies for team offense and defense will complete this module.

### **PPC650 Sepak Takraw**

The basics of sepak takraw as a class activity in schools will be introduced in this module. Emphasis will be on service, spiking, offensive and defensive strategies, rules and umpiring skills applicable to the secondary schools.

### **PPC651 Boardsailing**

For students with little or no previous experience. How to sail competently on all points of sail.

### **PPC652 Tennis**

This module is designed to assist trainee teachers develop their basic tennis skills to a level of efficiency that will enable them to introduce and teach the game to beginners. Contents covered include forehand and backhand groundstrokes, serves, volleys, lobs, drops, overheads, tactics and strategies, and rules and etiquette of the game.

### **PPC653 Table Tennis**

The basic techniques and tactics. Grip; use of spin; service; rallying; mobility; rules and scoring; management of tournaments and competitions.

### **PPC654 Squash**

This introductory course will provide trainee teachers with the basic skills and knowledge to play competitive squash. Skills taught include drives, boasts, drops, lobs, overheads and serves. Trainee teachers will also learn to referee and mark the games and be acquainted with the safety issues in the game of squash.

### **PPC655 Sailing**

An introductory course in dinghy sailing where terminology in sailing, knots, parts of a dinghy, and safety aspects of sailing will be introduced. Knowledge and skills of launching and recovery, the main points of sail and basic right of way rules will be covered.

### **PPC656 Advanced Gymnastics**

Personal performance and advanced skills on floor and selected apparatus.

### **PPC657 Aerobics**

Trainee teachers will gain an understanding of the components and training principles involved in a group aerobic exercise class in order to lead a safe and effective group exercise session in schools. Types of low and high impact activity, group leadership, routine choreography, and resistance training programming will be covered.

## **PPC658 Weight Training**

Weight (resistance) training techniques, terminology and methods. Safety procedures related to the use of both fixed equipment and free weights. The principles of specificity, overload, adaptation and overload relating to strength training, endurance training, power training and circuit training. Basic physiology is introduced.

## **PPC659 Canoeing**

An introductory course in basic canoeing skills and capsize (rescue) drills. Fun and challenging canoeing games and activities will be introduced to enable trainee teachers to both learn and teach skills to their students. Practical experiences with canoeing, both in the swimming pool and open sea, will be provided.

## **PPC660 Softball**

Basic techniques: overarm throwing, catching, underhand pitching, hitting and running bases. Application of rules of the game with special safety concerns. Basic tactics such as advancing a runner and co-ordinating defensive play. Learning experiences in drills and simulated game situations in small groups and full game-playing scenarios.

## ACADEMIC SUBJECT

### Physical Education

Year	Module Code	Title	Module Category	No. of AUs	Pre-requisites
1	PPA510	Human Functional Anatomy	Core	2	-
	PPA511	Introduction to Physical Education & Sport	Core	2	-
	PPA512	Health Education	Core	2	-
	PPA514	Physiology of Exercise, Health and Nutrition	Core	2	PPA510
	PPA515	Skill Acquisition	Core	2	-
2	PPA613	Social and Psychological Foundation of Physical Education and Sports	Core	2	-
	PPA616	Biomechanics	Core	2	-

#### PPA510 Human Functional Anatomy

Variation in the form and structure of the body and how this affects physical performance. Anatomical terminology of the various systems of the body. Relevance of the Skeletal, Nervous, Cardiovascular, Respiratory and muscular systems to physical education and sports.

#### PA511 Introduction to Physical Education and Sport

A course emphasising concepts related to the broad field of physical education and sport. It provides an overview of the disciplines that study the field's philosophical, historical, cultural, and scientific foundations and its application in the field. Examines the structure of national sport organisations and their relationships to promoting participation in sports from the recreational to high performance levels. The daily

work in physical education and sport, looking at the traditional field of teaching and coaching are highlighted. Current issues and future directions in the field for the twenty-first century are also explored.

### **PPA512 Health Education**

This course is designed to develop and provide planned learning experiences to supply information, change attitudes, and influence behavior. It aims to foster in students the concept of wellness and help them make informed choices towards adopting healthy lifestyles. Topics include healthy living, fitness, nutrition, stress management and the use of alcohol, smoking and drugs and their inherent problems.

### **PPA514 Physiology of Exercise, Health and Nutrition**

Aspects of exercise physiology that are most relevant to the Physical Education teacher in Singapore, namely, thermoregulation in children and adolescents; children and physical performance and the energy systems; the physiological adaptations that occur with physical training. The Cardiorespiratory System in Health and Disease.

### **PPA515 Skill Acquisition**

Introductory studies on the relevance of selected areas to the processes of learning and performing motor skills. The individual as a complex organism, which operates under varied environmental conditions. Particular reference to learning theories,

motor control, practice conditions, transfer of learning, memory and retention.

### **PPA613 Social and Psychological Foundation of Physical Education and Sports**

This module introduces the social psychology of physical activity with particular reference to the dynamics of personal and situational interaction in sport and exercise settings. Specifically, the module will examine issues and theories of motivation, arousal and anxiety, personality, competition and co-operation, team dynamics, aggression, and moral development.

### **PPA616 Biomechanics**

The fundamental mechanical concepts and principles which govern human movement will be discussed in detail. The effect of internal and external forces which act on the human body during movement will be analysed.

## PRACTICUM

Module Code	Title	Module Category	No. of AUs	Pre-requisites
PPR611❖	Practicum	Core	0	-

- ❖ Although the Practicum carries zero AUs, a trainee teacher must pass the Practicum before he/she can be awarded the PGDE.

### PPR611 Practicum

The main objective of the Practicum is to provide trainee teachers with an opportunity to link the theory of teaching with the practice of teaching as well as to develop competence in classroom teaching. During the Practicum, the trainee teacher will also reflect on the skills of planning, managing, organising and evaluating their lessons in physical education.

## LANGUAGE ENRICHMENT AND ACADEMIC DISCOURSE SKILLS

### Use of English in Teaching

The module for this subject (PCU511) is described in page 136.