# Diploma in Education Programme Handbook

1989-90

Institute of Education

AAU-4886

CONTENTS


| | | Page |
|---|---|---|
| 1. | INTRODUCTION | 1 |
| 2. | PRACTICUM | 5 |
| 3. | CURRICULUM STUDIES | 9 |
| | Practice of Educational Principles - PEP(C) | 10 |
| | Teaching of English Language in Secondary Schools | 12 |
| | Teaching of Literature in English at Secondary and Pre-University Levels | 16 |
| | Teaching of Chinese Language | 22 |
| | Teaching of Confucian Ethics (Chinese-medium) | 26 |
| | Teaching of Malay Language | 29 |
| | Teaching of Mathematics in Secondary Schools | 33 |
| | Teaching of Biology in Secondary Schools | 37 |
| | Teaching of Chemistry in Secondary Schools | 41 |
| | Teaching of Physics in Secondary Schools | 45 |
| | Teaching of Accounting at Secondary and Pre-University Levels | 50 |
| | Teaching of Management of Business at Pre-University Levels | 55 |
| | Teaching of Geography in Secondary Schools, Pre-University Centres and Junior Colleges | 60 |
| | Teaching of History at Secondary and Pre-University Levels | 64 |
| | Teaching of Economics in Pre-University Centres and Junior Colleges | 68 |
| | Teaching of Design and Technology in Secondary Schools | 71 |
| | Teaching of Art in Secondary Schools | 76 |
| | Teaching of Music in Secondary Schools | 79 |
| 4. | FOUNDATION STUDIES | 82 |
| | Principles of Educational Practice - PEP(E) | 83 |

AAU-4886

CONTENTS


| | | Page |
|---|---|---|
| 1. | INTRODUCTION | 1 |
| 2. | PRACTICUM | 5 |
| 3. | CURRICULUM STUDIES | 9 |
| | Practice of Educational Principles - PEP(C) | 10 |
| | Teaching of English Language in Secondary Schools | 12 |
| | Teaching of Literature in English at Secondary and Pre-University Levels | 16 |
| | Teaching of Chinese Language | 22 |
| | Teaching of Confucian Ethics (Chinese-medium) | 26 |
| | Teaching of Malay Language | 29 |
| | Teaching of Mathematics in Secondary Schools | 33 |
| | Teaching of Biology in Secondary Schools | 37 |
| | Teaching of Chemistry in Secondary Schools | 41 |
| | Teaching of Physics in Secondary Schools | 45 |
| | Teaching of Accounting at Secondary and Pre-University Levels | 50 |
| | Teaching of Management of Business at Pre-University Levels | 55 |
| | Teaching of Geography in Secondary Schools, Pre-University Centres and Junior Colleges | 60 |
| | Teaching of History at Secondary and Pre-University Levels | 64 |
| | Teaching of Economics in Pre-University Centres and Junior Colleges | 68 |
| | Teaching of Design and Technology in Secondary Schools | 71 |
| | Teaching of Art in Secondary Schools | 76 |
| | Teaching of Music in Secondary Schools | 79 |
| 4. | FOUNDATION STUDIES | 82 |
| | Principles of Educational Practice - PEP(E) | 83 |

Page

Educational Studies Electives - ESEs ..... 85

Cognitive and Social Development of Adolescents ..... 86

Helping Adolescents with Learning Problems ..... 89

Managing Classroom Interaction ..... 91

Strategies for Effective Teaching and Learning ..... 94

Helping the Adolescent through Guidance and Counselling 96

Moral Education in Singapore : Curriculum Issues ..... 99

Design for Learning ..... 101

Evaluating Cognitive and Affective Learning ..... 103

The Social Context of Teaching and Schooling ..... 105

Problems and Issues in Singapore Education : Comparative, Sociological and Historical Perspectives . 107

Home and School ..... 110

Using Pupil Learning Styles to Maximize Instructional Effectiveness ..... 112

5. PERSONAL DEVELOPMENT STUDIES ..... 114

Oral Communication (English) ..... 115

Oral Communication (Chinese) ..... 119

Oral Communication (Malay) ..... 121

Information Technology in Education ..... 123

Social and Moral Issues ..... 126

Managing Extra-Curricular Activities - MECA ..... 131

Managing the Art Club - Ceramics ..... 132

Managing the Art Club - Chinese Painting ..... 133

Managing the Art Club - Design ..... 134

Managing the Art Club - Drawing and Painting ..... 135

Managing the School Band ..... 136

Page

Managing the School Choir ..... 138

Managing the Recorder Group ..... 139

Managing the LDDS - Drama ..... 141

Managing the LDDS - Debating ..... 143

Managing the Hobbycraft Club ..... 145

Managing the Home Economics Club ..... 146

Managing the Social Studies Club ..... 147

Managing the Plastic Craft Club ..... 150

Managing the Wood Craft Club ..... 153

Managing the Mathematics Society ..... 156

Managing the School Science Society ..... 158

Managing the AVA Club ..... 159

Managing the Computer Club ..... 161

Managing the School Library Club ..... 162

Managing the Community Service ..... 164

Managing the Girl Guide Companies and Units ..... 166

Managing the National Police Cadet Corps (NPCC) in a Secondary School ..... 168

Sports MECA - Badminton ..... 170

Sports MECA - Dance ..... 171

Sports MECA - Netball ..... 172

Sports MECA - Soccer ..... 175

Sports MECA - Swimming ..... 176

Sports MECA - Table-Tennis ..... 177

Sports MECA - Tennis ..... 178

Sports MECA - Track & Field (Coaching) ..... 180

Sports MECA - Track & Field (Officiating) ..... 182

## LIST OF TABLES


Page

TABLE

1 Structure and Schedule of the Diploma in Education Programme ..... 4


## LIST OF FIGURES


Page

FIGURE

1 Conceptual Map of Practicum Curriculum ..... 3

2 SE and TP Periods compared with the School Calender Year ..... 6

# 1. INTRODUCTION

The Diploma in Education Programme is offered as a one-year full-time programme for university graduates who intend to make teaching their career. Those who complete the programme successfully are conferred the diploma by the National University of Singapore.

The practicum is the core of the programme to provide the base for student teachers to relate principles to practice and learning experiences to develop basic teaching skills and overall teaching competence. It is closely linked to the other courses and activities. The structure of the programme is organised in four major areas, namely:

1. Practicum
    - Macroteaching during the period of full-time attachment to schools
    - Microteaching in laboratory situations
2. Curriculum Studies
    - Practice of Educational Principles [PEP(C)]
    - Curriculum Studies Option I
    - Curriculum Studies Option II
3. Foundation Studies
    - Principles of Educational Practice [PEP(E)]
    - Educational Studies Elective
4. Personal Development Studies
    - Oral Communication
    - Information Technology in Education
    - Managing Extra-Curricular Activities
    - Social and Moral Issues
    - Civil Defence

Table 1 shows the structure and schedule of the programme. Figure 1 shows the conceptual map of the various components of the practicum curriculum.

This handbook contains the organization and objectives of school experience and teaching practice as well as the syllabuses of courses offered in the Diploma in Education Programme. Each syllabus has information on duration, course objectives, course content, mode of assessment and references for essential reading. Further information on specific courses can be obtained from staff members responsible for coordinating or conducting these courses.

CHONG TIAN HOO (DR)
Head/Diploma in Education Programme

July 1989

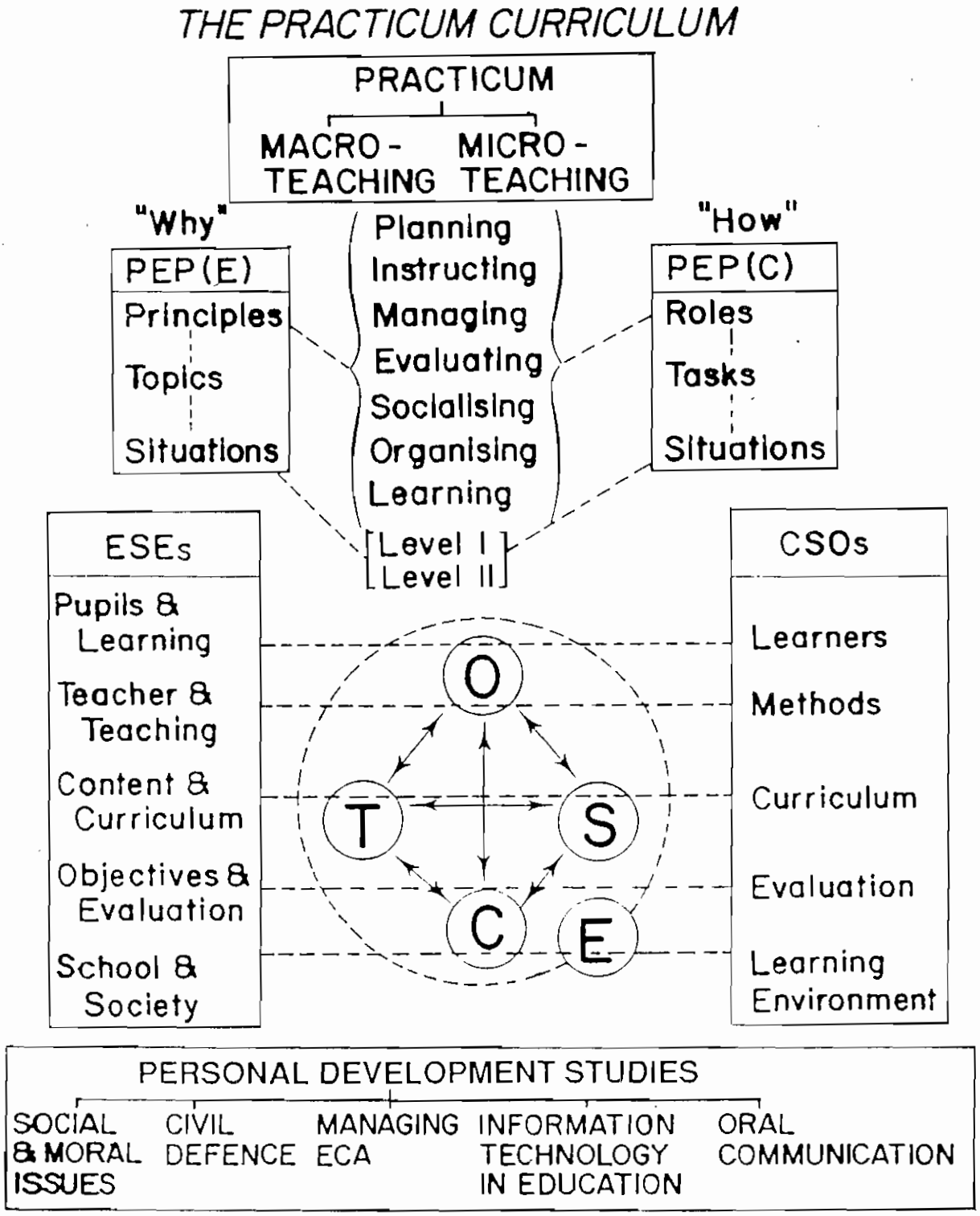



Figure 1. Conceptual Map of Practicum Curriculum

## ANNEX 1 : STRUCTURE AND SCHEDULE OF THE DIPLOMA IN EDUCATION PROGRAMME

| Areas of Study/Courses | Term Hours | Jul | Sep | Jan | Mar | Mode of Assessment |
|---|---|---|---|---|---|---|
| 1. Practicum | | | | | | |
| 1.1 Macro-teaching (SE & TP) | 260 | | | 160 | 100 | APT Ratings |
| 1.2 Micro-teaching | 60 | 30 | 30 | | | APT Ratings |
| 2. Curriculum Studies | | | | | | |
| 2.1 Practice of Educational Principles, PEP(C) | 90 | 30 | 40 | 10 | 10 | Assignment and Examination |
| 2.2 Curriculum Studies Option I | 60 | 20 | 20 | 10 | 10 | SB Assignment |
| 2.3 Curriculum Studies Option II | 60 | 30 | 20 | 10 | | LR Assignment |
| 3. Foundation Studies | | | | | | |
| 3.1 Principles of Educational Practice, PEP(E) | 90 | 30 | 30 | 15 | 15 | Assignment and Examination |
| 3.2 Educational Studies Elective | 60 | | 30 | 10 | 20 | SB/LR Assignment |
| 4. Personal Development Studies | | | | | | |
| 4.1 Oral Communication | 0 - 60 | 20 | 20 | 10 | 10 | Progress Ratings and Test |
| 4.2 Information Technology in Education | 0 - 30 | 20 | 10 | | | Progress Ratings |
| 4.3 Managing ECAs | 60 | 30 | 30 | | | Progress Ratings |
| 4.4 Social and Moral Issues | 30 | 10 | 20 | | | Assignment |
| 4.5 Civil Defence | 20 | 20 | | | | - |
| TOTAL | 790-880 | 240 | 250 | 225 | 165 | |

APT : Assessment of Performance in Teaching

SB : School-based

LR : Library Research

Notes

1. Jul Term: 9 lecture weeks
   Sep Term: 11 lecture weeks
   Jan Term: 3 lecture weeks
   Mar Term: 5 lecture weeks

2. School Experience(SE) and Teaching Practice(TP) will take place during the January and March terms.

2 PRACTICUM

- Macroteaching
- Microteaching

## PRACTICUM

The practicum is a purposeful series of supervised learning experiences aimed at preparing student teachers to a level of beginning teaching competence, and promoting the development of their professional capacities for reflective learning and self-evaluation. It involves student teachers in teaching activities which are either simulated (as in microteaching sessions on campus) or in the classroom in school (in teaching practice experiences).

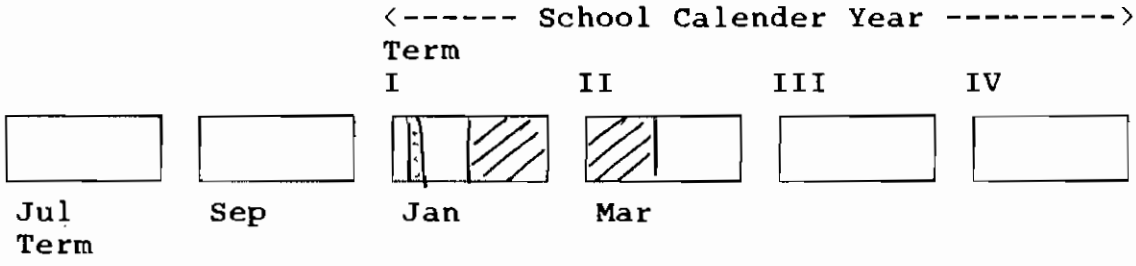
## ORGANIZATION OF IN-SCHOOL PRACTICUM EXPERIENCES

The in-school practicum experiences are arranged into two periods:

(a) School Experience [2 weeks]

(b) Teaching Practice [10 weeks]

Figure 2 SE and TP Periods compared with the School Calender Year




## OBJECTIVES OF IN-SCHOOL PRACTICUM EXPERIENCES

The objectives are to provide the opportunities for student teachers to:

1. apply and practice the principles of teaching and learning in the classroom;

2. develop practical understanding and appreciation of the major teacher roles, and to acquire the skills related to these roles;

3. broaden their experiences, understanding, and awareness of the realities of teaching and learning in the schools;

4. develop an understanding of children, and skills to respond appropriately to their needs, interests, and capacities;

5. acquire confidence through experiencing success in teaching situations;

6. develop skills in professional decision-making, and capacities for reflective learning and self-evaluation;

7. develop qualities of adaptability and sensitivity to the school situation.

## SCHOOL EXPERIENCE (SE)

The two-weeks of School Experience will introduce the student teachers to the practical realities of schools and the range of roles expected of teachers. Student teachers will also develop initial ideas in organization and planning of school work, in classroom management, and in the curriculum. When combined with subsequent placement at the same school the two-week School Experience will provide a valuable basis for Teaching Practice.

### Objectives

Student teachers will have the opportunities to:

1. broaden their experience, understanding and awareness of the realities of teaching and learning in the schools;

2. develop practical understanding and appreciation of the teacher's roles within the classroom, school, and community;

3. prepare for their Teaching Practice school attachment.

### Student Expectations

At this early stage, the major emphases must be on observational and informal participation in class and school activities. Student teachers should attempt only a limited number of lesson presentations. They will need to be given opportunities to:

1. observe teaching and school organization in action.

2. enquire into and discuss aspects of pupil development, school philosophy and procedures.

3. gather information on syllabuses, schemes of work, textbooks, curricular materials, and teaching aids.

4. gain an introduction to teaching methods and try some of these for themselves (max. 5 teaching periods per week).

5. become oriented to working with cooperating teachers.

## TEACHING PRACTICE (TP)

Teaching Practice is a ten-week block of school attachment undertaken at the same school where the student teacher has his/her School Experience (SE). It is scheduled to commence on the sixth week of the first (school) term and end on the fifth week of the second term.

### Objectives

Teaching Practice is a period of intensive development towards acquiring beginning teaching competence and student teachers will be guided and assisted by their cooperating teachers and IE supervisors through systematic observation and conferences.

Student teachers will have the opportunities to gradually assume the full teaching responsibilities. Some of the major teaching processes to be emphasized during this period of pre-service practical preparation will include those of Planning, Instructing, Managing, Evaluating, Socializing, Organizing, and Learning. Student teachers must view this experience of full instructional responsibility as a learning rather than practice situation.

### Student Expectations

Student teachers will be expected to:

1. become involved with, and actively participated in, all aspects of the school's programme,

2. assume full instructional responsibilities in the class,

3. teach approximately 16 periods (18 periods for pair teaching students) per week of CSO1 and CSO2 subjects (at a ratio 2:1) in secondary schools, or 10 periods per week in junior colleges,

4. observe their Cooperating Teachers teach at least 1 period per week.

3 CURRICULUM STUDIES

- Practice of Educational Principles - PEP(C)
- Curriculum Studies Option I - CSO1
- Curriculum Studies Option II - CSO2

COURSE TITLE : Practice of Educational Principles - PEP(C)

DURATION : 90 hours

LECTURER : Dr Chen Ai Yen (Coordinator)

RATIONALE : It is assumed that the student teachers of the course are graduates of subject disciplines and some of them in fact have teaching experience. Their knowledge of subjects and of learners is of utmost importance in the practice of teaching. The course seeks not only to increase the student teachers' knowledge, awarenesse, and skills in the process of teaching and learning but also to produce reflective classroom teachers. It will assist professional development by supplementing their experience and to enable them to reflect on their own role. Additionally, it will assist them in conducting research.

OBJECTIVES : At the end of the course, the student teachers should be able to

1. understand how the cognitive, behavioural and humanistic perspectives and key philosophical and sociological concepts and theories influence classroom teaching.

2. acquire the essential skills to observe, analyze, instruct, manage and organize a class or a group of pupils.

3. apply basic skills related to the seven roles in teaching, namely, planning, instructing, managing, evaluating, organizing, socializing, and learning.

4. teach and manage a class in one/two specific subject areas.

5. acquire the right attitude that foster learning and relationship among pupils of different abilities, race, culture, religion and social economic status.

CONTENT : The PEP(C) course is organized into four major teacher roles: planning, instructing, managing and evaluating that are linked to three minor roles: socializing, organizing, and learning. Subsumed under the roles are a range of tasks commonly performed in the preparation, development and evaluation of classroom teaching and learning.

Using an experiential learning approach, the student teachers are guided to use their own immediate concrete experience in lectures, tutorials, workshops and micro-teaching as the basis for observation and reflection. These observations are assimilated into theories from which new implications for action can be deduced and these implications are used to plan and organize new experiences in actual classroom situations during teaching practice.

ASSESSMENT : By continual assessment, a written assignment and an examination.

REFERENCES :

1. Bedwell, L. et al. (1984). Effective Teaching. Springfield, Illinois : Charles C Thomas.

2. Cole, P.G. & Chan L. (1987). Teaching Principles and Practice. Australia : Prentice Hall.

3. Cooper, J.M. et al. (1982). Classroom Teaching Skills. 2nd Edition. Lexington, Mass : D.C. Heath.

4. Gronlund, N.E. (1985). Measurement and Evaluation in Teaching. 5th Edition. New York : McMillan.

5. Heinich, R. et al. (1985). Instructional Media and the New Technologies of Instruction. 2nd Edition. New York : John Wiley.

COURSE TITLE : The Teaching of English Language in Secondary Schools

DURATION : 60 hours

LECTURER : Staff of the English Studies Department

RATIONALE : This course aims to prepare students for their roles and tasks as effective teachers of English Language in Singapore. This includes the understanding of language learning and teaching principles, familiarity with the present syllabus, textbooks, resources and materials, and the knowledge as well as ability to evaluate pupils, teaching materials and methods in order to choose and implement various teaching approaches to suit the different pupil learning levels and needs. The course also aims to give students practical experience of lesson planning and presentation by practising in micro-teaching sessions and during Teaching Practice in schools.

OBJECITVES : The course is intended to enable student teachers to:

1. be introduced to recent aspects of language teaching methodology.

2. adapt existing textbooks where necessary to suit classroom needs and write original and appropriate materials where necessary.

3. work on specific problem areas they may have identified.

4. identify the advantages (or disadvantages) of a communicative and integrated approach to language teaching.

CONTENT : 1. Principles

1.1 A review of the more recent approaches to the teaching of the four major language skill areas - listening, speaking, reading and writing.

1.2 Methods for integrating the teaching of the four major skill areas and ways of integrating the teaching of grammar within these skill areas.

1.3 An evaluation of current English Language secondary school textbooks and ways of using them effectively.

1.4 The development/adaptation of materials and aids for teaching English and methods of using them effectively.

1.5 A review of the types of assessment and their uses in language teaching.

2. Methodology

2.1 Listening

2.1.1 A review of the skills involved in listening comprehension, including critical listening.

2.1.2 Methods of teaching listening comprehension.

2.1.3 The preparation/adaptation of a range of listening materials and worksheets.

2.1.4 The use of the language laboratory and audio cassette players.

2.2 Speaking

2.2.1 A review of pupil problems in Singapore.

2.2.2 Methods of improving pupils pronunciation, stress and intonation.

2.2.3 Methods of stimulating pupil self-expression via oral activities in the classroom, with particular reference to the organisation of pair and group interaction.

2.3 Reading

2.3.1 A review of text structuring features and reading skills such as scanning, skimming, predicting and inferring.

2.3.2 A survey and evaluation of techniques used in association with reading comprehension passages, e.g. questions, gapped texts, matrices, diagrams, etc.

2.3.3 Methods for assessing levels of texts difficulty, pupil reading levels and pupil progress.

2.3.4 The preparation/adaptation of a variety of materials for classroom activities to encourage pupil participation and interest.

2.3.5 Ways to plan an extensive reading programme and stimulate pupil interest in reading.

2.3.6 Methods of teaching vocabulary enrichment.

2.4 Writing

2.4.1 A review of the main types of school writing and the skills involved.

2.4.2 A survey and evaluation of teaching techniques used in teaching guided and free writing.

2.4.3 Methods of assessing pupils' work.

2.4.4 The preparation/adaptation of a variety of materials for classroom activities to encourage pupil participation and interest.

2.5 Grammar

2.5.1 An examination of the most frequent errors made by Singapore secondary pupils and the significance of these errors for language teaching.

2.5.2 Methods of teaching grammar with an emphasis on an integrative and communicative approach.

ASSESSMENT : Performance in the course will be assessed by a written assignment which will incorporate practical course work such as writing materials to complement the use of textbooks, adapting materials and evaluating these materials after trying them out in the classroom. This will be undertaken during Teaching Practice.

REFERENCES :

1. Abbot, G. & Wingard, P. (1981). The Teaching of English as an International Language. UK: Collins.

2. Brumfit, C. & Johnson, K. (eds). (1979). The Communicative Approach to Language Teaching. UK: UOP.

3. Byrne, D. (1976). The Teaching of Oral English.

4. Byrne, D. (1979). Teaching Writing Skills. UK: Longman.

5. Grellet, F. (1981). Developing Reading Skills : A Practical Guide to Reading Comprehension Exercises. UK: CUP.

6. Johnson, K. & Morrow, K. (1980). Communicative Language Teaching : Issues and Applications. UK: Longman.

7. Littlewood, W. (1981). Communicative Language Teaching. UK: CUP.

8. Lunzer, et al. (1984). Learning from the Written Word. UK: Oliver and Boyd.

9. Nuttall, C. (1982). Teaching Reading Skills in a Foreign Language. UK: Heinemann Educational Books.

10. Raimes, A. (1983). Techniques in Teaching Writing. UK: OUP.

11. Ur, P. (1984). Teaching Listening Comprehension. UK: CUP.

12. Ur, P. (1981). Discussions that Work. UK: CUP.

13. Wallace, M. (1982). Teaching Vocabulary. UK: Heinemann Educational Books.

14. White, R. (1980). Teaching Written English. UK: Heinemann Educational Books.

COURSE TITLE : Teaching of Literature in English at Secondary and Pre-University Levels

DURATION : 60 hours

LECTURERS : Mr Goh Soo Tian (Coordinator)
Mr Robert Yeo
Dr Dudley de Souza
Mr Victor Neo

RATIONALE : The course is aimed at graduates who possess an Honours degree in English literature or who have done a course in English Literature as one of their subjects in the University.

It is assumed that these student teachers have a sufficiently comprehensive grasp of the skills required for the understanding of the kind of literary texts they would be required to teach in the secondary school and junior college. Nevertheless, since the University Literature course is not aimed at preparing students to teach Literature, this course is seen as a means of transmitting the cognitive and pedagogic skills required in literature education.

Student teachers would need to be aware of the aims and objectives of teaching English Literature in the context of Singapore and the kinds of approaches, methods and techniques that could be effectively used for teaching Literature. They would also need to be familiar with the problems of sequencing material, the planning of a Literature lesson, the range of texts and the criteria for their selection, and the use of support materials and resources. Finally, they would need to know how to devise appropriate assignments and tests for assessing and evaluating student performance in literature.

All these would have to be seen within the framework of a practical understanding of the problems of implementation confronting the teacher of English Literature (or Literature in English).

OBJECTIVES : Student teachers should by the end of the course be able to :

1. choose and implement the most appropriate approaches, methods and techniques for

teaching Literature at Secondary School and Pre-U levels.

2. plan Literature lessons that are effective.

3. understand the requirements of the Secondary School and Pre-U literature syllabuses.

4. select and use appropriate supporting aids that are relevant to the literature texts they teach.

5. comprehend the kinds of literature assessment found in schools and public examinations and set appropriate assignments and tests for assessing and evaluating student performance in literature.

CONTENT : A Curriculum and Syllabus

1. Aims and objectives of teaching Literature in English.

2. The nature of literary discourse.

3. Explaining the fundamental concepts in drama, poetry, novels and short stories e.g. theme, plot, characterization, setting symbolism and imagery.

4. School syllabuses and the Singapore-Cambridge Syndicate Literature syllabuses.

5. Textbook selection : factors involved in determining suitability and difficulty of literature texts.

B Learners

6. Learner variables that affect literature learning:

6.1 Language factors: level of learner's language competence.

6.2 Developmental factors: level of learner's prior knowledge, experience and maturation.

6.3 Cultural factors: bridging socio-cultural differences that separate learners and foreign literature text (e.g. English, American, African).

6.4 Attitudinal factors: creating motivation for literature study and interest in specific texts.

6.5 Environmental factors: exploring home, school, community support to literature study through extensive reading, projects, theatre, cinema and the other arts.

C Methods of Presenting and Teaching Literature

7. Poetry

7.1 Introduction to poetic discourse: approaches to the study of poetry e.g. practical criticism, stylistics and discourse analysis.

7.2 Presenting the features of poetic discourse: metrics, rhyme, imagery, etc.

7.3 Methods and techniques for the teaching of the sub-genres of poetry: the ballad, the sonnet, blank verse, free verse, etc.

7.4 Teaching writing about poetry.

7.5 Planning individual lessons for the teaching of poetry and sequencing lessons to form a unit of instruction.

8. Drama

8.1 The nature of dramatic discourse.

8.2 Making use of background information/schematic knowledge to introduce and teach plays.

8.3 Techniques of teaching a scene, an act and a whole play.

8.4 Language-based activities (with special reference to the teaching of Shakespeare).

8.5 Discussing plot, characterization and theme in plays.

8.6 Teaching writing about aspects of a play.

8.7 Teaching Shakespeare: issues and problems.

8.8 Planning individual lessons based on a prescribed text and sequencing lessons to form a unit of instruction.

9. Short Stories

9.1 Introduction to the short story genre.

9.2 Approaches, methods and techniques for teaching different types of short stories.

9.3 Teaching short story structure: story grammar.

9.4 Teaching local short stories: issues and problems.

9.5 Teaching writing about short stories.

9.6 Planning an individual lesson based on a short story and sequencing lessons to form a unit of instruction.

10. Novels

10.1 Teaching how to read novels: approaches, methods and techniques.

10.2 How to introduce aspects of the novel: plot, characterization, theme, style and point of view.

10.3 Using extrinsic factors, viz. biographical, historical and sociological information, in the teaching of novels.

10.4 Teaching form and structure in the novel.

10.5 Teaching writing about aspects of the novel.

10.6 Planning individual lessons for teaching a chapter/chapters of a prescribed text and sequencing lessons to form a unit of instruction.

D Assessment and Evaluation

11. The Literature examination: analysing the Singapore-Cambridge 'O' and 'A' level literature papers and examiners' reports on performance of past candidates.

12. Assessing student performance in literature: setting literature assignments and classroom tests.

13. Informal modes of assessment of student performance in relation to literature study: reading inventory, group projects, creative writing, student journal/diary, multi-media presentation etc.

14. Providing feedback and preparing students for literature examinations.

15. Evaluating effectiveness of literature programmes.

E Mode of Assessment

Assessment of student teachers' performance in this course is by a written assignment. For CSO1, the assignment involves the planning of an instructional unit with the appropriate teaching materials which will be carried out and evaluated during Teaching Practice. For CSO2, the assignment involves library research and takes the form of an essay of 2000 words on some aspect of teaching the subject.

REFERENCES :

1. Adams, R. (1985). Teaching Shakespeare. Robert Royce. (PR 2987 Tea)

2. Benton, M. & Fox, G. (1985). Teaching Literature: Nine to Fourteen. OUP. (PR 33 Ben)

3. Brumfit, C.J. (ed). (1983). Teaching Literature Overseas: Language-based Approaches. Pergamon Press. (PR 37)

4. Dunning, S. & Howes, A.B. (1975). Literature for Adolescents: Teaching Poems, Stories, Novels and Plays. Scott Foresman. (PN 59 Dun).

5. Engleton, T. (1983). Literary Theory: An Introduction. Basil Blackwell.

6. Elkins, D. (1976). Teaching Literature: Designs for Cognitive Development. Charles Merrill. (LB 1575 Elk)

7. Fitch, R.E. (ed). (1981). Literary Theory in the English Classroom. Ohio University Press. (PN 85 Lit)

8. Griffith, O. (ed) (1981). Language and Literature. Open University Press. (PE 1065 Ope)

9. Liu, M.P. & Yeo, R. (1984). To Cipher and to Sing: Ideas and Activities for Literature Teachers. Federal Publications. (PR 51 Sin. L)

10. Moody, H.L.B. (1971). The Teaching of Literature. Longman. (PN 59 Moo)

11. Rodrigues, R.J. & Badaoski. (1978). A Guidebook for Teaching Literature. (PN 59 Rod)

12. Widdowson, H.G. (1975). Stylistics and the Teaching of Literature. Longman. (PN 59 Wid)

COURSE TITLE : Teaching of Chinese Language

DURATION : 60 hours

LECTURERS : Mr Neo Eng Guan (Coordinator)
Staff of Department of Asian Language Studies

RATIONALE : Language is one of the most important subjects in school. Students' achievement in language depends on having knowledgeable and skilful teachers. The graduates of Chinese Language and Literature usually are in lack of knowledge of Chinese Linguistics and CL2 teaching. This course, therefore, has been designed to equip the student teachers with an in-depth knowledge of Modern Chinese Linguistics and with the skills to teach Chinese Language and Literature in secondary schools and junior colleges as well.

OBJECTIVES : This course aims to provide the student teachers with the following knowledge and skills:

1. Language, linguistics and language teaching;
2. The objective, curriculum and syllabus for secondary and pre-university level;
3. Teaching methodology of CL2 at different levels and abilities and its evaluation;
4. The teaching of Chinese Literature and its evaluation.

CONTENT :

1. Introduction : Language, Linguistics and Language Teaching

   1.1 The structural elements of language and the communicative functions;

   1.2 Language and thought;

   1.3 Linguistic Science and its relation with language teaching - Second Language learning theories;

   1.4 The objective and the content of the teaching of Chinese language in Singapore context;

1.5 Problems that CL2 teachers may face in the teaching of Chinese in Singapore;

1.6 The construction of a scientific and systematic language lesson plan.

2. Basic Methods and Strategies in CL2 Teaching (including lesson plans for the teaching of language skills, vocabulary and grammar).

3. Understanding the Learner's Background - Various Approaches to CL2 Teaching.

4. The Teaching of Listening and Speaking Skills

4.1 The objectives and the content of the teaching of listening and speaking skills;

4.2 The theoretical base of audio-lingual teaching method and the use of language laboratory;

4.3 Various approaches to the teaching of listening and speaking skills supported by lesson plans;

4.4 Listening and speaking tests, and the evaluation based on tests' outcome.

5. The Teaching of Reading Skills

5.1 The objective and the content of the teaching of reading;

5.2 The theoretical foundation of the teaching of reading;

5.3 The development of reading skills and reading strategies;

5.4 Various approaches to the teaching of reading supported by lesson plans;

5.5 Reading tests and the evaluation based on tests' outcome.

6. The Teaching of Writing Skills

6.1 The objective and the content of the teaching of writing skills;

6.2 The methods of teaching writing skills;

6.3 The correction of pupils' composition and the remedial measure;

6.4 Writing tests and the evaluation based on tests' outcome.

7. Testing and Evaluation

7.1 Language exercises and language tests;

7.2 The principles of planning a language test;

7.3 The evaluation of the outcome of a test paper with reference to language learning and language teaching;

7.4 Action Research on the Teaching of Chinese.

8. The Teaching of Vocabulary and Grammar

8.1 The teaching of vocabulary;

8.2 The teaching of Chinese syntax;

8.3 Vocabulary and grammar tests and the evaluation based on tests' outcome.

9. The Teaching of Chinese Literature

9.1 The objectives in the teaching of Chinese Literature;

9.2 The teaching of the knowledge of the history of Chinese Literature;

9.3 The teaching of selected literary works;

9.4 Literature tests and the evaluation based on tests' outcome.

10. Overall review on Language Teaching Problems Encountered during Teaching Practice. (Panel Discussion).

ASSESSMENT : The performance of student teachers in this course will be assessed by assignment. Each student teacher is required to do ONE school-based assignment. The assignment would preferably be tied up with the exploration of Macro-teaching experience and Micro-teaching skills.

NATIONAL INSTITUTE OF EDUCATION

REFERENCES :

1. Department of Asian Language Studies (ed). (1989). Selected Articles on the Teaching of Chinese Language. Institute of Education.

2. Dulay, Heidi et al. (1982). Language Two. New York: Oxford University Press.

3. Gui Shi Chun. (1985). Phycholinguistics. Shanghai: Foreign Language Education Publication.

4. Tang Ting Chi. (1981). Linguistics and Language Teaching. Taiwan Student Book Co. Ltd.

5. Wang De Chun. (1983). Studies of Modern Linguistics. Fu Jian People Publication.

6. Zhang Ding Yuan. (1985). Collection of Articles on the Teaching of Chinese at Secondary Level. Tianjin: Xin Lei Publication.

7. Zhang Hong Ling. (1982). Methodology of Language Teaching. Beijing: Pei Jing Normal University Publication.

8. Zhang Zhi Gong. (1981). Collection of Essays on Language Teaching. Fu Jian Education Publication.

COURSE TITLE : Teaching of Confucian Ethics (Chinese-Medium)

DURATION : 60 hours

LECTURER : Mr Ong Yong Peng

RATIONALE : Confucian Ethics has been incorporated into the education system in Singapore secondary schools. This course is offered for Dip Ed (Chinese) programme students. It aims at equipping student teachers with the content knowledge and teaching methodology of Confucian Ethics so as to enable them to teach this subject in schools after completing the course.

OBJECTIVES : The course aims at:

1. providing a sufficient foundation on the content of Confucian Ethics to the students;

2. familiarising the students with the instructional materials of Confucian Ethics produced by CDIS;

3. acquainting the students with various teaching methodologies and methods of evaluation for the learning performance in Confucian Ethics.

CONTENT :

1. The teaching of Confucian Ethics in the Singapore context

   1.1 The background of Confucian Ethics.

   1.2 Aims of teaching Confucian Ethics.

   1.3 Objectives of learning Confucian Ethics.

2. A preview and discussion on the instructional materials for Confucian Ethics developed by CDIS.

3. The facts in Confucian Ethics

   3.1 Social background leading to Confucianism.

3.2 The founders of Confucianism and the prominent representatives.

- Historical background
- The biographies of Confucian scholars
- Various schools of thought

4. Various approaches specific to the teaching of Confucian Ethics

4.1 Strategies for classroom teaching.

4.2 Activities for slow/normal learners.

5. Mastering the knowledge of Confucian Ethics

5.1 The "five relationships" in human society.

5.2 Attitude towards life.

5.3 How to teach this knowledge.

6. Understanding the important concepts of Confucian Ethics

6.1 Benevolence, Wisdom, Courage, Rightness, Propriety, and Faith.

6.2 How to teach these concepts.

7. Lesson planning in Confucian Ethics.

8. Testing and evaluation

8.1 The design of exercise and test construction.

8.2 Evaluation of teaching.

9. Problems encountered during teaching practice in the teaching and learning of Confucian Ethics.

10. Confucian Ethics in the modern society

10.1 The contemporary significance of Confucianism.

10.2 Confucius influences in East Asia.

ASSESSMENT : Student teachers will have to submit ONE library research assignment on Confucian Ethics.

REFERENCES :

1. Cai Shaangsi. (1982). The Thought of Confucius. Shanghai: Renming Publication.

2. Chen Bingcai. (1983). Confucius. Beijing, Zhong Hua Shuju.

3. Fan Shoukang. (1983). Zhuzi and His Philosophy. Beijing: Zhong Hua Shuju.

4. Kuang Yaming. (1985). A Critical Biography of Confucius. China: Qilu Shushe.

5. Xie Bingying. (1967). Four Books. Taiwan: San Ming Shuju.

6. Xu Fuguan. (1969). The History of Chinese Philosophy on Human Nature. Taiwan: The Commercial Press.

7. You Zhenglun. (1982). Teaching Methodology. Beijing: Jiaoyu Kexue.

8. Zhong Hua Congshu. (1960). A Collection of Studies on Confucius. Taiwan: Taiwan Shuju.

9. Zhong Hua Congshu. (1963). A Collection of Studies on Mencius. Taiwan: Taiwan Shuju.

COURSE TITLE : Teaching of Malay Language

DURATION : 60 hours

LECTURERS : Staff of Department of Asian Language Studies

RATIONALE : Language is one of the most important subjects in schools. Students' motivation and achievement in language depends on having knowledgeable and skillful teachers. The need to train Malay Language teachers with the required skills in classroom teaching as well as having an in-depth knowledge of Malay Language and Literature has already been established. As these student teachers are graduates in Malay Studies, the linguistic and Literature aspect will not be emphasized, instead a practicum-based approach to teacher-training is adopted in line with the varied roles and tasks of the Malay Language teachers as planner, manager, instructor, facilitator and evaluator of the Malay Language programmes and lessons.

OBJECTIVES : The main objective of this course is to train Malay Language teachers who will have the knowledge and skills to teach in secondary schools and junior colleges. Upon completion of the course the student teachers should be able to:

1. plan an effective Malay Language programme and lessons according to the level, the syllabus and the needs of the pupils;

2. instruct, facilitate and enhance Malay Language teaching such as the teaching of the various language skills among the pupils of the various streams (express/ normal) by adopting suitable teaching methods, techniques and strategies;

3. utilize, adopt and adapt Malay Language teaching materials and resources to optimum use;

4. design, construct and mark assignments, tests and examination papers in order to assess their pupils in oral and written performance, and

5. understand and be sensitive to the trends and issues concerning Malay Language learning and teaching.

CONTENT : Term 1

The main focus for this term will be the role of the language teacher as a planner and manager of the language programme. A good planner has to understand the pupils he will be teaching as well as the materials he will be using in order to achieve optimum result from the lesson. Thus the following topics will be included:

1. Reviewing L2 syllabus for the Normal and Express streams.

2. Planning procedures for ML2 lesson.

3. Interpreting objectives and rationale for L2 syllabus.

4. Drawing up a scheme of work based on the syllabus.

5. Specifying instructional objectives for L2 teaching in listening, speaking, reading and writing.

6. Choosing strategies and methods in achieving instructional objectives.

7. Adapting, reviewing and using the newly prescribed ML2 textbooks and supplementary materials.

8. Organization of language classes.

Term 2

This term will deal mainly on the role of the language teacher as facilitator and instructor. Content-wise the major focus will be on classroom teaching strategies. As such, the following topics will be provided:

1. Approaches, methods and techniques in Language teaching.

2. Approaches to the teaching of the four language skills namely listening, speaking, reading and writing.

3. Methods of integrating the four language skills.

4. Motivating pupils' interest for ML2 learning.

5. Selecting appropriate teaching aids for ML2 learning.

6. Recapitulating and reinforcing language elements such as vocabulary, etc.

7. Explaining language lessons.

8. Preparing language worksheets and suitable exercises.

Term 3

Teaching Practice.

Term 4

The final term will be devoted to areas related to language testing which is in line with the role of the language teacher as an evaluator. The topics to be covered will be:

1. Assessing pupils' level of ML2 proficiency in the 4 language skills.

2. Designing a good test, the marking of tests and the analysis of test items.

3. Identifying the areas of need and weakness in ML2 learning.

4. Diagnosing language learning difficulties for remedial teaching.

ASSESSMENT : The performance of student teachers in this course will be assessed by an assignment related to ML2 teaching. Those taking this course as CSO1 will do ONE school-based assignment and those who opted the course as CSO2 will do ONE library-based assignment or a school-based assignment where possible.

REFERENCES :

1. Abdullah Hassan. (1980). Linguistik Am Untuk Guru Bahasa Malaysia. Kuala Lumpur: Fajar Bakti.

2. Asmah Haji Omar (ed). (1984). Kaedah Pengajaran Bahasa, Kuala Lumpur: DBP.

3. Azman Wan Chik. (1982). Trend-trend Bahru Dalam Bidang Pendidikan Bahasa, Kuala Lumpur: Utusan Publications.

4. Azman Wan Chik. (1982). Pengujian Bahasa: Kee Bahasa Melayu, Kuala Lumpur: DBP.

5. Azman Wan Chik. (1982). Ujian Bahasa Malaysia: Panduan dan Teknik, Kuala Lumpur: Utusan Publications.

6. Koh Boh Boon. (1981). Pengajaran Bahasa Malaysia, Kuala Lumpur: Utusan Publications.

7. Mohd Taib Osman. (1977). Pengajaran Bahasa dan Kesusasteraan Melayu, Kuala Lumpur: DBP.

8. Raminah Hj Sabran and Rahim Syam. (1985). Kajian Bahasa Untuk Pelatih Maktab Penguruan, Kuala Lumpur: Fajar Bakti.

NATIONAL INSTITUTE OF EDUCATION

COURSE TITLE : Teaching of Mathematics in Secondary Schools

DURATION : 60 hours

LECTURERS : Mdm Berinderjeet Kaur
Mdm Chai Chee Meng
Dr Lim Suat Khoh (Coordinator)
Mr Wong Hee Sing

RATIONALE : Mathematics is an important subject in the secondary school curriculum. Teaching mathematics effectively involves a set of complex knowledge and skills. Recent developments in mathematics education have emphasised the match between the structure of mathematics, the pedagogical structure of classroom instruction, and the learning outcomes of pupils. Hence, student teachers should acquire a broad spectrum of knowledge about mathematics education, a wide range of specific classroom skills, and a reflective understanding of mathematics instruction to enable them to adapt to changing circumstances in their future teaching career.

OBJECTIVES : The objectives cover the following 4 aspects of mathematics instruction:

1. Curriculum

   (a) To know the general aims of mathematics education.

   (b) To understand the nature of mathematics.

   (c) To use history of mathematical ideas in instruction.

   (d) To know the mathematical content (main concepts, skills and principles) that is required in the various secondary mathematics syllabi: Elementary Mathematics, Additional Mathematics and 'A' Level Mathematics.

   (e) To analyse each topic in relation to the whole syllabus in terms of hierarchy and application.

(f) To know the application of mathematics to realistic situations and across the curriculum.

(g) To understand the nature of mathematical thinking such as looking for patterns and relationships, problem solving, and various types of proof.

2. Knowledge of Learners

(a) To apply knowledge about the psychological development of pupils in mathematics instruction.

(b) To assess pupils' needs in terms of prior knowledge, learning styles, and attitudes.

(c) To know common difficulties and misconceptions in the understanding of mathematics.

3. Teaching Methods

In the teaching of each topic, the student teachers should be able to

(a) choose relevant learning objectives,

(b) select appropriate activities, resource materials and teaching aids, including computer software,

(c) use appropriate teaching strategies,

(d) relate teaching strategies to general problem solving skills and study habits,

(e) cater for the learning needs of Normal, Express, and Special pupils.

4. Evaluation

(a) To understand the objectives of evaluation.

(b) To know the various types of evaluation used in mathematics instruction.

(c) To choose the appropriate activities/ strategies to evaluate pupils' performance.

NATIONAL INSTITUTE OF EDUCATION

CONTENT :

1. Description of a model of mathematics instruction.

2. Nature and history of mathematics.

3. Aims of secondary mathematics education and syllabi.

4. Basics : instructional objectives, scheme of work, lesson plans in mathematics teaching.

5. Teaching approaches in Mathematics : exposition, investigation, drill and practice, discussion, problem-solving.

6. Psychology of mathematics education and the nature of mathematical thinking.

7. Teaching of various topics in the syllabi:

   (a) Number system, ratio, variation, use of calculator in the classroom.

   (b) Algebra : Algebraic concepts, equations, inequalities, graphs, sets, matrices, sequences.

   (c) Euclidean geometry, transformation geometry, trigonometry, 2-dimensional vector space.

   (d) Statistics and probability.

   (e) Calculus.

8. Construction and use of teaching aids.

9. Computer-assisted learning in mathematics.

10. Error analysis and pupils' learning difficulties.

11. Construction and analysis of mathematics tests; evaluation of pupil's progress for diagnosis, remediation and enrichment.

12. Sources of information about mathematics education at local and international level.

13. Enrichment in Mathematics.

ASSESSMENT : Student teachers will be assessed by means of one assignment:

(a) Assignment for CSO1 Mathematics

This will be a school-based assignment to be implemented during Teaching Practice. It should relate to the theories of mathematics education that have been covered in the course.

(b) Assignment for CSO2 Mathematics

This assignment will be based on a library research on a certain aspect of mathematics education.

REFERENCES :

1. Bell, F.H. (1978). Teaching and learning mathematics in secondary school. Dubuque, Iowa : Wm.C. Brown Co. (QA11.6 Bel)

2. Bolt, B. (1985). More mathematical activities : A resource book for teachers. Cambridge University Press. (QA95 Bol)

3. Cockcroft, W.H. (1982). Mathematics counts. London : HMSO. (QA14 Gre.G)

4. Davis, R.B. (1984). Learning mathematics: The cognitive science approach to mathematics education. London : Croom Helm. (QA11 Dav)

5. Farrell, M. & Farmer, W. (1980). Systematic instruction in mathematics Addison-Wesley. (QA11 Far)

6. Hart, K.M. (ed.) (1981). Children's understanding of mathematics : 11 - 16. London : John Murray. (QA14 Gre.C)

7. Lenchner, G. (1983). Creative problem solving in school mathematics. Boston : Houghton Mifflin. (QA63 Len)

COURSE TITLE : Teaching of Biology in Secondary Schools

DURATION : 60 hours

LECTURERS : Mrs Ruth Chellappah (Coordinator)
Miss Wan Yoke Kum

RATIONALE : This course will prepare student teachers for teaching Biology at the upper secondary level and Science at the lower secondary level. It will focus on basic teaching skills and up-to-date methods of science teaching, including field trips to enhance awareness of the environment at large. Besides the traditional role of the teacher as an instructor, the course will look into the theory and classroom practices for the varied roles of the teacher as a planner, facilitator, manager and evaluator of science teaching.

OBJECTIVES :

1. To provide for the professional development of the student teacher, in particular the understanding of how pupils learn, the teaching methods to use, and the evaluative techniques to apply.

2. To provide training in the communication of knowledge, drawing upon Biology exemplars.

3. To expose student teachers to the curriculum to be taught, innovative approaches, teaching strategies and techniques for different ability levels in the teaching of Biological Science in secondary schools and junior colleges.

4. To discuss organisation, control of pupil behaviour, and safety aspects in the school laboratory.

5. To introduce the wide variety of resources available and to promote the use of audio-visual aids in the teaching of Biological Science.

6. To consider evaluation of teaching and learning in biology classes.

CONTENT : The course will expose student teachers to a wide variety of practical learning experiences through lectures, tutorials, seminars and field trips.

Topics to be dealt with will be covered under five main themes.

1. Understanding My Pupils

   1.1 Ways in which pupils think and learn (relating learning theories to practice in science).

   1.2 Planning for Biology instruction with objectives in mind.

   1.3 Individual differences in pupil ability and strategies for dealing with normal and/or express stream pupils.

   1.4 Prevention and control of disruptive behaviour in the science classroom and laboratories.

2. Exploring Various Approaches

   2.1 Examination of the effectiveness of various approaches for teaching different concepts in science.

   2.2 Guiding discovery learning.

   2.3 Using classroom demonstrations to teach science.

   2.4 The development and use of illustrated investigative worksheets to guide group work in the laboratory.

   2.5 The importance of fieldwork and hands-on sessions in the teaching of science.

3. Managing the Science Environment

   3.1 Management and organisation of equipment in science laboratories for practical sessions.

   3.2 Laboratory safety and first-aid in case of accidents.

   3.3 Audio-visual aids and resource material available for teaching Biology.

NATIONAL INSTITUTE OF EDUCATION

3.4 Organisation and preparation of a school science exhibition/science fair.

3.5 The organisation and running of a school science society including discussions of suitable activities for the society.

3.6 Availability and use of various equipment that can be used in different situations inside and outside the laboratory.

4. Evaluation and Feedback

4.1 Evaluation of teaching.

4.2 Evaluation of learning including;

- planning and construction of a science test
- marking exam papers/test questions,
- analysis of test results,
- item banking.

5. Specifics of Biology Teaching

5.1 The role of the Biology teacher, including the socio-moral aspects of teaching Biology.

5.2 Examination of various syllabi for science in secondary schools, textbooks approved by the MOE, CDIS material for lower secondary science, and relevant magazines and journals for science teachers.

5.3 The role of resource centres in aiding the teaching of Biology. These include:

- The Botanic Gardens,
- The Zoological Gardens,
- The Science Centre,

with visits arranged to familiarise student teachers with their educational potential.

5.4 Improvisation of simple aids to use in the teaching of ecology.

5.5 The planning and organisation of field trips, including precautions to be taken with respect to parental consent, accidents, first-aid etc.

ASSESSMENT : The assessment of this course is through the completion of an assignment:

(a) Assignment for CSO1

A school-based practical assignment slanted towards action-research. Student teachers may design specific curriculum material or some instruments for try-out during their attachment to schools for teaching practice.

(b) Assignment for CSO2

A written essay of about 2000 words, involving a library research area selected by the student teacher or assigned by the supervisor.

REFERENCES :

1. Allen, D. (1979). Biology Teacher's Desk Book. New York : Parker Publishing Company.

2. Dallas, D. (1980). Teaching Biology Today. Hutchinson.

3. Dowdeswell, W.H. (1981). Teaching and Learning Biology. London : Heinemann.

4. Ingle, R.B. & Jennings, A.J. (1981). Science in Schools, Which Way Now? London : Institute of Education.

5. Shayer, M., & Adey, P. (1981). Towards a Science of Science Teaching. London : Heinemann.

6. UNESCO Handbook for Science Teachers (1980). London : Heinemann.

COURSE TITLE : Teaching of Chemistry in Secondary Schools

DURATION : 60 hours

LECTURERS : Dr Chia Lian Sai (Coordinator)
Mrs Lam Yoke Yeen
Dr Goh Ngoh Khang

RATIONALE : For effective Chemistry teaching, a student teacher should acquire essential professional skills and possess certain subject specifics. Thus, the course aims to provide student teachers with the following two-fold development, namely,

(a) professional development, which deals with the understanding of pupils, various teaching approaches and evaluation techniques;

(b) specialist development, which deals with the physical environment and curriculum concerns of the subject.

OBJECTIVES : The course will prepare student teachers for teaching Chemistry in secondary schools as well as junior colleges. Appropriate emphasis will be given to the teacher's role both in the classroom and in the laboratory. Upon completion of this course, student teachers should be able to:

1. understand their pupils and how science concepts are formed;

2. identify the various techniques and resources available in the teaching of Chemistry;

3. formulate safety and organisational strategies in science laboratories;

4. plan, set and mark a science test paper;

5. analyse and interpret a set of data with appropriate techniques;

6. know some essential specifics of Chemistry teaching.

CONTENT : 1. Understanding My Pupils

1.1 Understanding individual differences and various strategies to deal with different ability groups, with particular reference to slow learners.

1.2 Examining the way pupils think.

1.3 Finding out what is understood by pupils.

1.4 How Science concepts are formed?

1.5 Fostering a better teacher-pupil interaction during science lessons.

2. Exploring Various Approaches

2.1 General methods of teaching science.

2.2 Guiding discovery learning; Inquiry method.

2.3 Individual/group work with worksheets and activities.

2.4 Classroom demonstration techniques.

2.5 Individualised instruction.

2.6 Computer-assisted learning in Chemistry.

3. Managing the Science Environment

3.1 Resources for Chemistry teaching.

3.2 Improvisation of useful aids/apparatus.

3.3 Planning and organisation of laboratory work.

3.4 Storage of chemicals and equipment.

3.5 Safety in science laboratories.

3.6 First aid in science laboratories.

3.7 Common accidents in science laboratories.

4. Evaluation and Feedback

4.1 Evaluation of teaching to improve the quality of science teaching and pupils' learning.

4.2 Functions and principles of classroom testing.

4.3 Planning, setting and marking of a science test.

4.4 Analysis and interpretation of test results.

4.5 Operational procedures for criterion-referenced tests and norm-referenced tests.

5. Specifics of Chemistry Teaching

5.1 Chemistry syllabi and textbooks.

5.2 CDIS Lower Secondary Science and 'N' level Science.

5.3 Other curriculum projects in Chemistry and Science.

5.4 Common misconceptions in Chemistry.

5.5 Teaching strategies for a variety of Chemistry areas.

ASSESSMENT : Assessment of student performance is by means of the following assignment:

1. School-Based Assignment (for CSO1). This is a practical assignment. The student teachers should design some materials for Chemistry teaching. They can select from any ONE of the following areas:

(a) Teaching module

(b) Teaching aids

(c) Test items

They are also encouraged to design some instruments for try-out of their materials during their attachment to schools.

In assessing this assignment, weight would be given to practicality and relevance of materials, use of available materials, creativity, originality, layout and design of the project and a brief evaluation.

2. Library research assignment (for CSO2). The student teachers should write an essay related to any ONE of the following areas:

   (a) Review of some Chemistry papers/ articles.

   (b) Evaluation of a Chemistry curriculum project.

   (c) Writing of specific Chemistry curriculum materials.

   The descriptions and/or comments would be about 2000 words.

REFERENCES :

1. Chia, L.S. & Goh, N.K. (Ed.) (1980). Useful Information for Chemistry Teachers. Singapore : Science Teachers' Association of Singapore. (QD 33 Joh)

2. Johnstone, A.H. et al. (1981). Chemistry About Us. UK : Heinemann. (QD 33 Joh)

3. Klausmeier, H.J. (1981). Learning and Teaching Concepts. New York : Academic Press Inc. (LB 1025.2 Kla)

4. McGrath, D.M. (1978). Laboratory Management and Techniques for Schools and Colleges. Malaysia : RECSAM and Anthonian Book Store Sdn Bhd. (Q 183 Sea)

5. Shayer, M. & Adey, P. (1981). Towards a Science of Science Teaching. UK : Heinemann. (Q 181 Sha)

6. TAPS (Techniques for the Assessment of Practical Skills in Foundation Science), Teacher's Guide and Materials. (1983). UK: Heinemann.

7. UNESCO (1981). New Trends in Chemistry Teaching, Volume V. Paris : The Unesco Press. (R QD 40 Car).

COURSE TITLE : Teaching of Physics in Secondary Schools

DURATION : 60 hours

LECTURERS : Dr Chia Teck Chee (Coordinator)
Mr Toh Kok Aun
Mr Yeo Keng Hoe

RATIONALE : A beginning teacher is understandably preoccupied with teaching as effectively as possible. He will, if he is also a science teacher, also have to contend with maintaining a safe environment while working in the laboratory as well as the specifics of the curriculum he has to teach. The course seeks to provide for this two-fold development of the student teacher, viz.

(a) professional development, concerned with understanding of pupils, of teaching methods and of evaluative techniques;

(b) specialist development, concerned with the intricacies of the physical environment support as well as curriculum concerns of the subject.

OBJECTIVES : The course will prepare student teachers for teaching Physics at the upper secondary and pre-university levels, as well as Science at the lower secondary level. Upon completion of the course, student teachers should be able to :

1. exhibit competence in a variety of teaching skills.

2. understand their pupils and how internalisation of knowledge best takes place for different ability groups.

3. identify the various approaches and resources available in the teaching of Physics.

4. formulate organizational and safety strategies in school laboratories.

5. plan and construct a test paper.

6. analyse and interpret a set of data with various techniques.

CONTENT : 1. Understanding My Pupils

1.1 Understanding individual differences and adopting a variety of strategies to deal with different ability groups, with particular reference to slow learners.

1.2 Examining the way pupils think, through actual simulation.

1.3 Finding out what is understood by pupils.

1.4 Affective development and the science teacher.

1.5 Fostering a better teacher-pupil interaction during science lessons.

2. Exploring Various Approaches

2.1 Effectiveness of various approaches.

2.2 Guiding discovery learning.

2.3 Effectiveness of individual/group work with worksheets.

2.4 Techniques of classroom demonstration.

2.5 The benefits of individualised instruction.

2.6 Micro-computers for instruction in Physics.

2.7 Use and misuse of visual materials in science lessons.

3. Managing the Science Environment

3.1 Principles for planning class experiments.

3.2 Organising laboratory sessions.

3.3 Ideas for storage of science equipment.

3.4 What sort of improvisation can be resorted to in the absence of the real thing?

3.5 Basics of laboratory safety.

3.6 Rendering first aid.

3.7 Case studies of accidents.

3.8 Detecting and rectifying simple faults in laboratory appliances.

4. Evaluation and Feedback

4.1 Evaluation of teaching to improve the quality of teaching and pupils' learning.

4.2 Planning and constructing a science test.

4.3 Analysing of test and examination performance.

4.4 Operational procedures for norm-referenced tests, criterion-referenced tests, and item analysis.

5. Specifics of Physics Teaching

5.1 Interpreting the syllabus.

5.2 Planning a lesson for maximum impact.

5.3 Lower Secondary Science and 'N' level Science.

5.4 Curriculum projects/packages in other countries.

5.5 Commonly misconceived concepts in Physics.

ASSESSMENT : Assessment of student performance is by means of the following assignment:

(a) Assignment for CSO1 Physics

This assignment is slanted towards action-research, and is to be implemented during teaching practice. It should be based on the design of a teaching unit and should highlight ways of getting across the concepts to be taught.

Should the use of teaching aids or teaching materials be necessary to enhance the teaching efforts, they should be included as part of the teaching unit. The assessment of this assignment is weighted towards design of the materials/aids itself, creativity, originality, practicality, layout and design of the study.

(b) Assignment for CSO2 Physics

This will normally take the form of:

* library research,
* review of some science papers/ articles,
* evaluation of a curriculum project,
* writing of specific curriculum materials.

The review or evaluation should be around 2000 words.

REFERENCES :

1. Barlex, D. & Carree, C. (1985). Visual Communication in Science. UK : Cambridge University Press.

2. Chia, T.C. et al. (1985). Report on 'Alternative Assessment in Science Practicals (Physics)'. Singapore : Institute of Education.

3. Driver, R. (1983). The Pupil as Scientist? UK : Open University Press.

4. McGrath, D.M. (1978). Laboratory Management and Techniques for Schools and Colleges. Malaysia : RECSAM and Anthonian Book Store Sdn Bhd.

5. McKeaclue, W.J. (1978). Teaching Tips: A Guidebook for the Beginning College Teacher. Massachusetts : D.C. Heath.

6. Shayer, M. & Adey, P. (1981). Towards a Science of Science Teaching. UK : Heinemann.

7. TAPS (Techniques for the Assessment of Practical Skills in Foundation Science), Teacher's Guide and Materials. (1983). UK: Heinemann.

8. UNESCO. (1980). UNESCO Handbook for Science Teachers. London : Heinemann.

COURSE TITLE : Teaching of Accounting at Secondary and Pre-University Levels

DURATION : 60 hours

LECTURER : Mrs Tey Sau Hing

RATIONALE : The purpose of introducing Accounting as a subject in the school curriculum is to equip pupils, who intend to seek employment in the commerical and industrial establishments with financial knowledge and skills in accounting. The achievement of such an objective is dependent to a large extent on what goes on in the classroom and the methods and techniques used by the teacher to present subject matter. This methodology course is conducted to ensure the development and dissemination of as many sound ideas in teaching practice to the Accounting teachers as possible. It examines the teaching of the subject in the context of its usefulness and relevance to pupils in relation to their future roles in the commercial world.

OBJECTIVES : This course is designed to prepare the business teacher to teach Accounting in secondary schools and junior colleges.

The course will prepare student teachers to:

1. evaluate the extent to which current practices of teaching Accounting in the schools can meet the needs and demands of the commercial world.

2. identify and describe the objectives and rationale of teaching Accounting in secondary schools.

3. recognise and describe their role as Accounting teachers and their contributions to the commercial sector of the Singapore economy.

4. write lesson plans on various topics included in the 'A' level Accounting syllabus.

5. develop critical and analytical skills in the design and evaluation of methods and techniques for teaching Accounting.

6. demonstrate the use of various methods and techniques in Accounting teaching.

7. evaluate and produce instructional materials and teaching aids in Accounting.

8. plan and organise for getting feedback on pupils' progress.

9. discuss the common problems in the teaching and learning of Accounting and offer solutions to them.

CONTENT : 1. Subject Matter

1.1 Examining the nature of the subject.

1.2 Identifying the aims and objectives of teaching Accounting.

1.3 Analyzing the objectives, scope and structure of the 'N', 'O' and 'A' level syllabuses.

1.4 Planning for Accounting teaching

1.4.1 writing instructional and behavioural objectives.

1.4.2 preparing schemes and units of work.

1.4.3 analyzing specific Accounting topics and identifying key concepts and principles.

1.4.4 writing lesson plans.

1.4.5 assessing appropriateness of recommended Accounting texts.

2. Teaching Methods/Resource Materials

2.1 Expository teaching

- lecture
- demonstration
- note-taking and note-making.

2.2 Tutorial method

- small group discussion
- class discussion
- seminar/workshop.

2.3 Inquiry method.

2.4 Case studies.

2.5 Role-play and simulation games.

2.6 Project work.

2.7 Field studies.

2.8 Selecting and using relevant resources for Accounting teaching

- textbooks and other printed materials
- instructional aids
- worksheets.

2.9 Managing the Accounting room.

3. The Learner

3.1 Teaching normal stream pupils.

3.2 Teaching express stream pupils.

3.3 Teaching mixed ability groups.

3.4 Teaching 'A' level pupils in junior colleges and pre-university centres.

3.5 Identifying difficulties and problems in conceptual understanding.

3.6 Motivation in learning Accounting.

4. Evaluation

4.1 Analyzing Accounting test and examination papers at 'N', 'O' and 'A' levels.

4.2 Writing objective test items.

4.3 Constructing structured and essay questions.

4.4 Marking of tests

- preparing marking schemes
- marking essay answers.

4.5 Analyzing test results and designing remedial activities.

5. The Environment

5.1 Using community resources.

5.2 Field trips to business organisations.

ASSESSMENT : Student teachers are expected to do extensive reading on the various methods and techniques of teaching Accounting, to participate actively in the class activities which include the designing of teaching materials, the writing of lesson plans, lesson analysis, lesson presentation, application of methods and materials to their own class teaching, observation of pupils' responses and the sharing of experiences with one another.

At the end of the course, student teachers are required to submit:

(a) an essay of not less than 2000 words on one issue of Accounting teaching (CSO2).

(b) a school-based teaching unit in Accounting together with a report on its use and effectiveness (CSO1).

REFERENCES :

1. Calhoun, C.C. (1980). Managing the Learning Process in Business Education. Wadsworth Publishing Co. (HF 1106 Cal)

2. Gray, W.A. & Gerrard, B.A. (1977). Learning by Doing : Developing Teaching Skills. Addison-Wesley. (LB 1051.5 Gra)

3. International Labour Office. (1978). An Introductory Course in Teaching and Training Methods for Management Development. Geneva. (HD 30 Fra)

4. Musselman, V.A. & Hanna, J.M. (1979). Methods of Teaching Bookkeeping and Accounting. McGraw Hill. (HF 5365 Mus)

5. Smith, G. (1977). Techniques and Activities for Teaching Business Skills. Parker Publishing Co., New York. (HF 1107 Smi)

6. Thacker, R.J. (2nd Ed.) (1979). Accounting Principles. Prentice-Hall. (HF 5635 Tha)

COURSE TITLE : Teaching of Management of Business at Pre-University Levels

DURATION : 60 hours

LECTURER : Mrs Tey Sau Hing

RATIONALE : The purpose of introducing Management of Business as a subject in the school curriculum is to provide a basic knowledge of businesses and their various activities to those pupils who intend to seek employment in the commerical and industrial establishments and also to equip them with various management skills. Its achievement is dependent to a large extent on what goes on in the classroom and the methods and techniques employed by the teacher to present subject matter. This methodology course is designed to equip pre-service teachers with a repertoire of skills essential for them to function effectively in management classes in pre-U centres and junior colleges. It examines the teaching of the subject in the context of its usefulness and relevance for pupils in relation to their future roles as managers and supervisors.

OBJECTIVES : In this course, student teachers will be prepared to:

1. identify and describe the objectives and rationale of teaching Management of Business in schools.

2. recognise and describe the nature and scope of commercial education in Singapore, their roles as Management teachers and their significant contributions to the Singapore society.

3. implement the Management of Business syllabus effectively.

4. write lesson plans for the teaching of various management topics to various groups of pupils.

5. demonstrate the use of various methods and techniques in Management teaching.

6. develop critical and analytical skills in their design and evaluation of methods and techniques for teaching Management of Business.

7. evaluate and produce instructional materials and teaching aids in Management of Business.

8. diagnose learning difficulties of various groups of pupils, especially the slow-learners.

9. relate learning and motivational principles to the teaching of Management.

10. develop skills in evaluating pupils' learning and in using feedback from pupils to improve teaching.

CONTENT : 1. Subject Matter

1.1 Examining the nature of the subject.

1.2 Identifying the aims and objectives of teaching Management.

1.3 Analyzing the objectives, scope and structure of the 'N' and 'O' level Commerce and 'A' level Management syllabuses.

1.4 Planning for Management teaching:

1.4.1 writing instructional and behavioural objectives.

1.4.2 preparing schemes and units of work.

1.4.3 analyzing specific Management topics and identifying key concepts and principles.

1.4.4 writing lesson plans.

1.4.5 assessing appropriateness of recommended Management texts.

2. Teaching Methods/Resource Materials

2.1 Expository teaching

- lecture
- demonstration
- note-taking and note-making.

2.2 Tutorial method

- small group discussion
- class discussion
- seminar/workshop.

2.3 Inquiry method.

2.4 Case studies.

2.5 Role-play and simulation games.

2.6 Project work.

2.7 Field studies.

2.8 Selecting and using relevant resources for Management teaching

- textbooks and other printed materials
- instructional aids
- worksheets.

2.9 Managing the Commerce room.

3. <u>The Learner</u>

3.1 Teaching normal stream pupils.

3.2 Teaching express stream pupils.

3.3 Teaching mixed ability groups.

3.4 Teaching 'A' level pupils in junior colleges and pre-university centres.

3.5 Identifying difficulties and problems in conceptual understanding.

3.6 Motivation in learning Management.

4. <u>Evaluation</u>

4.1 Analyzing Management test and examination papers at 'A' level.

4.2 Writing objective test items.

4.3 Constructing structured and essay questions.

4.4 Marking of tests

- preparing marking schemes
- marking essay answers.

4.5 Analyzing test results and designing remedial activities.

5. The Environment

5.1 Using community resources.

5.2 Field trips to business organisations.

ASSESSMENT : Student teachers are expected to do extensive reading on the various methods and techniques of teaching Business Management, to participate actively in the class activities which include the designing of teaching materials, the writing of lesson plans, lesson analysis, lesson presentation, application of methods and materials to their class teaching, observation of pupils' responses and the sharing of experiences with one another.

At the end of the course, student teachers are required to submit:

(a) an essay of not less than 2000 words on an aspect of methodology in Management teaching (CSO2).

(b) a school-based teaching unit in Business Management together with a report on its use and effectiveness (CSO1).

REFERENCES :

1. Calhoun, C.C. (1980). Managing the Learning Process in Business Education. Wadsworth Publishing Co. (HF 1106 Cal)

2. Daughtrey, A.S. et al. (3rd Ed.) (1982). Basic Business and Economic Education Learning and Instruction. U.S.: South-Western Publishing Co. (HF 1111 Dau)

3. Elgood, C. (2nd Ed.) (1982). The Handbook of Management Games. Gower Publishing Co. Ltd. (HD 20.7 Elg)

4. International Labour Office. (1978). An Introductory Course in Teaching and Training Methods for Management Development. Geneva. (HD 30 Fra)

5. Miller, V.A. (1979). The Guidebook for International Trainers in Business and Industry. Van Nostrand Reinhold. (HD 5715 Mil)

6. Smith, H. (1983). Commerce: A Survival Kit. Pitman Publishing Ltd. (HF 5351 Smi)

COURSE TITLE : Teaching of Geography in Secondary Schools Pre-University Centres and Junior Colleges

DURATION : 60 hours

LECTURER : Mr Yee Sze Onn

RATIONALE : Good teaching not only depends upon a teacher's knowledge of content but also upon the quality of his training and the extent of his commitment. To function effectively, the teacher must have a knowledge of how children learn, what makes them learn and an appreciation of the different rates at which they learn. Hence a teacher regardless of his discipline must be knowledgeable of the theories and processes behind learning and the methods by which these theories can be translated into the practice of teaching in and outside the classroom.

OBJECTIVES : The course is intended for student teachers who have taken Geography at tertiary level. The main aim of the course is to equip them with the necessary skills relevant to the teaching of Geography in the secondary schools, pre-university centres and junior colleges. At the end of the course student teachers will be able to:

1. understand the aims and objectives of teaching Geography and its place in the school curriculum;

2. plan and teach lessons in class using strategies appropriate to the learning abilities of the pupils;

3. design and construct as well as select and evaluate instructional materials relevant to the teaching of Geography;

4. organise and implement field-based learning experiences.

CONTENT : The content of the course is organised around four themes: SUBJECT MATTER, METHODS, LEARNERS, and EVALUATION.

1. Theme 1 - Subject Matter

   1.1 Rationale and objectives of Geographic Education.

   1.2 Analysis of the lower secondary, 'O' level and 'A' level syllabuses.

   1.3 Preparing instructional units and lesson plans in Geography.

2. Theme 2 - Teaching Methods

   2.1 Classroom-based teaching strategies

      2.1.1 Teaching Geography through the expository method

      2.1.2 The use of case/sample study

      2.1.3 Role play

      2.1.4 The use of simulation games

      2.1.5 Photographs as tools of instruction

      2.1.6 The use of static and dynamic models in Geography teaching

      2.1.7 Computers in the teaching of geography

      2.1.8 Developing skills and concepts in map reading

      2.1.9 Developing pupils' skills in logical and critical thinking

      2.1.10 Learning skills in Geography

      2.1.11 Teaching values and attitudes through Geography.

   2.2 Teaching strategies - field approaches

      2.2.1 Objectives and purpose of field studies, organization and implementation of fieldtrips.

      2.2.2 The school as a learning laboratory.

2.2.3 The work of running water/waves - a fieldtrip to a stream/beach.

2.2.4 Field studies in rural areas.

2.2.5 Field studies in the city.

3. Theme 3 - The Learners

3.1 Teaching Geography to differentiated groups

3.1.1 Geography for express stream pupils and the gifted.

3.1.2 Teaching Geography to slow/normal stream learners.

4. Theme 4 - Assessment and Evaluation in Geography

4.1 Analysis of Cambridge examination papers ('N', 'O' and 'A' levels).

4.2 Design and construction of objective test items.

4.3 Setting and marking essay tests.

4.4 Summation and review of course.

ASSESSMENT : Assessment in this course is by assignment.

(a) Assignment for CSO1 Geography

A school-based assignment involving the planning of an instructional unit and the production of teaching materials to be implemented and evaluated during teaching practice.

(b) Assignment for CSO2 Geography

A library research assignment taking the form of an essay of 2000 to 3000 words on an aspect of teaching the subject.

REFERENCES : 1. Boardman, D. (Ed). (1985). New Directions in Geography Education. London: Falmer Press. (G 73 New)

2. Fien, J., Gerber, R. & Wilson, P. (1984). The Geography Teacher's Guide to the Classroom. Melbourne: Macmillan. (G 73 Fie)

3. Graves, N.J. (Ed.) (1982). New UNESCO Source Book for Geography Teaching. Paris: The Unesco Press. (G 73 Une)

4. Slater, F. (1982). Learning Through Geography. London: Heinemann. (G 73 Sla)

5. Stewart Dunlop (Ed.) (1979). Place and People. London: Heinemann. (G73 Pla)

6. Walford, R. (Ed.) (1981). Signposts for Geography Teaching. Sheffield: Geographical Association. (G 73 Wal)

nd
to
arning
around four
ARNERS, and

COURSE TITLE : Teaching of History at Secondary and Pre-University Levels

DURATION : 60 hours

LECTURER : Mr W. Jacob (Coordinator)

RATIONALE : The teaching of History cannot be carried out in a water-tight compartment. It must be grounded firmly in the principles and practice of education. In addition effective History teaching requires not only a sound knowledge of the content and a clear understanding of the nature of the subject, but also a keen appreciation of how pupils learn and comprehensive training in the relevant teaching skills and strategies. All this is essential for the achievement of the main objective of History teaching: to make learning of the subject meaningful and pleasurable so that learners will appreciate the relevance of its study.

OBJECTIVES : This course is intended to help student teachers:

1. relate the teaching of History to the principles and practice of education.
2. understanding the aims and objectives and examine the various approaches in the teaching of History.
3. acquire teaching skills and strategies relevant to the subject and appropriate to the different levels.
4. select, produce and use instructional materials and teaching aids.
5. design and construct various forms of assessment and evaluation in History.
6. to teach History within the content of its own environment.

CONTENT : 1. <u>The Subject Matter</u>

1.1 Examining the nature of History.

1.2 Discussing the general and specific objectives of teaching History.

1.3 Reviewing and evaluating the History syllabi in Singapore schools.

1.4 The New Secondary History (Sec 1 and 2) History project - CDIS.

1.5 The "New History" in England.

1.6 Schools Council History Project - History 13-16.

1.7 The Integrated Curriculum.

1.8 Planning for History teaching

- specifying instructional and behavioural objectives
- designing schemes of work
- writing History lesson plans
- identifying important concepts in History teaching
- evaluating History textbooks.

2. Teaching Methods/Resource Materials

2.1 Expository method - lecture and narration.

2.2 Tutorial method

- conducting small group discussion
- conducting class discussions.

2.3 Inquiry method.

2.4 Study skills - note making, note taking, essay writing, indexing and referencing.

2.5 Project work.

2.6 Field trips.

2.7 Games, simulation and role play.

2.8 Concept mapping in History.

2.9 Use of textbooks, documents, films, maps, charts, pictures, slides, newspapers, letters, diaries, etc.

COURSE TITLE : Teaching of History at Secondary and Pre-University Levels

DURATION : 60 hours

LECTURER : Mr W. Jacob (Coordinator)

RATIONALE : The teaching of History cannot be carried out in a water-tight compartment. It must be grounded firmly in the principles and practice of education. In addition effective History teaching requires not only a sound knowledge of the content and a clear understanding of the nature of the subject, but also a keen appreciation of how pupils learn and comprehensive training in the relevant teaching skills and strategies. All this is essential for the achievement of the main objective of History teaching: to make learning of the subject meaningful and pleasurable so that learners will appreciate the relevance of its study.

OBJECTIVES : This course is intended to help student teachers:

1. relate the teaching of History to the principles and practice of education.
2. understanding the aims and objectives and examine the various approaches in the teaching of History.
3. acquire teaching skills and strategies relevant to the subject and appropriate to the different levels.
4. select, produce and use instructional materials and teaching aids.
5. design and construct various forms of assessment and evaluation in History.
6. to teach History within the content of its own environment.

CONTENT : 1. <u>The Subject Matter</u>

1.1 Examining the nature of History.

1.2 Discussing the general and specific objectives of teaching History.

1.3 Reviewing and evaluating the History syllabi in Singapore schools.

1.4 The New Secondary History (Sec 1 and 2) History project - CDIS.

1.5 The "New History" in England.

1.6 Schools Council History Project - History 13-16.

1.7 The Integrated Curriculum.

1.8 Planning for History teaching

- specifying instructional and behavioural objectives
- designing schemes of work
- writing History lesson plans
- identifying important concepts in History teaching
- evaluating History textbooks.

2. Teaching Methods/Resource Materials

2.1 Expository method - lecture and narration.

2.2 Tutorial method

- conducting small group discussion
- conducting class discussions.

2.3 Inquiry method.

2.4 Study skills - note making, note taking, essay writing, indexing and referencing.

2.5 Project work.

2.6 Field trips.

2.7 Games, simulation and role play.

2.8 Concept mapping in History.

2.9 Use of textbooks, documents, films, maps, charts, pictures, slides, newspapers, letters, diaries, etc.

2.10 Managing the History Room.

3. The Learner

3.1 Teaching normal stream pupils and slow learners.

3.2 Teaching express stream pupils and the gifted.

3.3 Teaching mixed-ability groups.

3.4 Teaching 'A' level students (junior colleges/pre-U centres).

3.5 Identifying and overcoming learning difficulties in History - conceptual, linguistic, etc.

3.6 Motivating pupils to learn.

4. Evaluation

4.1 Analyse test and examination papers 'N', 'O' and 'A' levels.

4.2 Designing and constructing History tests: Objective/Structured/Essay-type.

4.3 The marking of tests

4.3.1 designing marking scheme.

4.3.2 marking of essays.

4.4 Using test results to plan for remedial work.

5. The Environment

5.1 The use of community resources - The National Museum, National Archives.

5.2 The study of settlement and change - Chinatown, Serangoon, Fort Canning.

ASSESSMENT : (a) Assignment for CSO1 History

A school-based teaching package on a unit relevant to History in the secondary school.

(b) Assignment for CSO2 History

An essay based on library research on a selected aspect or issue in History Education. The essay should be approximately 2000 words in length.

REFERENCES :

1. Ballard, M. (1970). New Movements in the Study and Teaching of History. London: Temple Smith.

2. Burston, W.H. (1972). Principles of Teaching History. London : Methuen.

3. Burston, W.H. & Thompson, D. (Ed.) (1967). Studies in the Nature and Teaching of History. Routlege and Kegan Paul.

4. Chaffer, J. & Taylor, L. (1979). History and the History Teacher. London: Evans Bros.

5. Crookhall, R.E. (1979). Handbook for History Teachers in West Africa. London: Evans Bros.

6. Dickinson, A. & Lee, P. (1980). History Teaching and Historical Understanding. London: Heinemann.

COURSE TITLE : Teaching of Economics in Pre-University Centres and Junior Colleges

DURATION : 60 hours

LECTURER : Mrs Maureen Ng

RATIONALE : To teach economics effectively the teacher should have a good grasp of the content of the subject and appropriate strategies for instruction. Economics is a theoretical subject, but to teach it well is not simply to teach the concepts and theories. Also important is the need to demonstrate to students its relevance to everyday life, and to develop in them the ability to analyse and evaluate economic problems and issues.

OBJECTIVES : Student teachers, on completing this course, should be able to:

1. plan units of work and daily lesson plans for selected economics topics.
2. develop varied teaching resources and instructional strategies for economics.
3. design evaluation procedures to assess pupil learning.
4. apply the above in the context of existing school conditions and pupil characteristics.

CONTENT :

1. <u>The Economics Curriculum</u>

   1.1 Aims and objectives of teaching economics in schools

   1.2 Curriculum rationale and design

   1.3 The Cambridge 'A' level economics syllabus

   1.4 Analysis of school schemes of work and specific instructional objectives

   1.5 Textbooks and teaching-learning resources for 'A' level Economics

2. Strategies for Classroom Instruction

   2.1 Teaching economic concepts and principles

   2.2 The concept attainment model

   2.3 Problem-solving approach

   2.4 Using case studies

   2.5 Teaching data analysis and interpretation

   2.6 Role-playing

   2.7 Field visits/field studies

   2.8 Computer-aided instruction

   2.9 Exercises and individual work

3. Teaching Selected Economic Topics

   3.1 The basic economic problem

   3.2 Demand theory

   3.3 Supply theory

   3.4 Price and output determination

   3.5 Distribution theory

   3.6 National Income accounting

   3.7 Theory of Income determination

   3.8 Money and financial institution

   3.9 International trade

   3.10 Government in the economy

4. Helping the Learner

   4.1 Understand economic concepts, principles and theories

   4.2 Apply economic principles to analyse and evaluate economic problems

   4.3 Utilise concept mapping and other learning tools

4.4 Develop essay writing skills in economics

5. The 'A' Level Economics Examination

5.1 The requirements of the 'A' level examination:

Paper 1 - Multiple-choice questions

Paper 2 - Statistical questions

Paper 3 - Essay questions

5.2 Marking and grading economics essays and data response answers

ASSESSMENT : (a) Assignment for CSO1 Economics

A teacher designed unit for economics containing unit plan, innovative lessons and teaching-learning resources.

(b) Assignment for CSO2 Economics

A paper of approximately 2000 words discussing the application of educational theory to the teaching of economics.

REFERENCES : 1. Atkinson, G.B.J. (3rd Ed). (1985). Teaching Economics. Heinemann. (H62)

2. Banaszak, R.A. & Brennan, D.C. (1983). Teaching Economics Content and Strategies. Addison-Wesley. (Red Spot)

3. Economics - Journal of the Economics Association. (1973 - ). Quarterly. (HB1)

4. Journal of Economic Education. Joint Council on Economic Education (1986 - ). Quarterly.

5. The Economic Review. Department of Economics, University of Southampton. (1987 - ).

6. Whitehead, D.J. (Ed). (1986). Second Handbook for Economics Teachers. Heinemann. (HB74.9) (Red Spot)

COURSE TITLE : Teaching of Design and Technology in Secondary Schools

DURATION : 60 hours

LECTURER : Mr Kwek Ah Kow

RATIONALE : The teaching of Design and Technology in secondary schools requires a wide range of knowledge and skills in working with wood, metal and plastics. In addition, student teachers would also require a clear perception of the developmental stages involved in conceptualising design ideas to the realisation of appropriate solution. Greater emphasis will be placed in acquiring the necessary teaching skills and strategies to enable the student teachers to teach, advise, and guide pupils in their design activities. Micro-teaching sessions will also be provided to develop teaching skills under simulated conditions.

OBJECTIVES : On successful completion of the course, student teachers should be able to:

1. understand the aims and objectives of the various course conponents in teaching the Design and Technology programme in secondary schools.

2. identify and use various teaching techniques and resources available in the teaching of Design and Technology.

3. advise and guide their pupils in design and folio development and realisation of artefacts.

4. organise and manage the design and technology room and workshop.

5. evaluate completed folios and artefacts of their pupils.

6. plan and construct tests.

CONTENT : 1. Subject Matter

1.1 Development of Technical Education in Singapore.

1.2 Craft, Design and Technology Curriculum.

1.3 The aims and objectives of teaching Design and Technology in Singapore secondary schools.

1.4 The Monolingual Technical Programme.

1.5 The Lower Secondary Syllabus and the CDIS STEP Modules.

1.6 Design and Technology at the Upper Secondary Levels

1.6.1 The 'O' Level Syllabus.

1.6.2 The 'N' Level Syllabus.

1.7 Planning for Design and Technology Teaching

1.7.1 Specifying instructional and behavioural objectives.

1.7.2 Designing schemes of work.

1.7.3 Writing lesson plans.

1.7.4 Developing instructional materials.

2. Methods of Teaching

2.1 Expository Method

2.1.1 Lecture

2.1.2 Shop Talk

2.2 Tutorial Method

2.2.1 Classroom Discussion

2.2.2 Small Group Discussion

2.3 Demonstration

2.4 Discovery/Inquiry Method

2.4.1 Springboard Technique

2.4.2 The Problem-Solving Approach

2.4.3 The Case-Study Method

2.4.4 The Project Method

2.4.5 Simulation

2.4.6 Field Trip

2.5 Individualised Instruction

2.5.1 Performance-based Instruction Modules

2.5.2 Computer Assisted Instruction

3. Topical Studies in Selected Areas

3.1 The Design Process

3.1.1 Problem Identification

3.1.2 Design Brief

3.1.3 Ideas Generation

3.1.4 Design Appraisal

3.1.5 Design Realisation

3.1.6 The Use of Computer in Design for Schools

3.2 Graphics Presentation

3.2.1 Pictorial Sketching

3.2.2 Orthographic Drawing

3.2.3 Colour Rendering

3.2.4 Folio Development

3.3 Integrated Craft (Wood, Metal and Plastics)

3.3.1 Marking Out

3.3.2 Jointing

3.3.3 Shaping

3.3.4 Forming

3.3.5 Machining

3.3.6 Safety Practices

4. Design Room and Workshop

   4.1 Organisation and Management

   4.2 Storage and Store-keeping

   4.3 Safety in the Work Areas

   4.4 Planning a New Area/Workshop

5. Resources

   5.1 Printed Materials

   5.2 Improvised Aids

   5.3 Pupil Folios and Artefacts

   5.4 AVA

   5.5 Other resources within and outside the school

6. Evaluation Techniques

   6.1 Requirements of the G.C.E. 'O' and 'N' Level Examinations

   6.2 Evaluation of Pupils Design Folios and Artefacts

   6.3 Test Construction and Item Banking

   6.4 Analysis of Test/Examination Performance

ASSESSMENT : Student teachers will be required to submit one school-based assignment. This will involve (a) the planning and development of a Design Folio and Artefact and (b) using the materials so developed to produce an instructional unit for implementation and evaluation during teaching practice.

REFERENCES :

1. CDIS STEP. (1987). Technical Studies for Secondary 1 Modules. Singapore : Longman Singapore Publishers (Pte) Ltd.

2. CDIS STEP. (1988). Design and Construction for Secondary 2. Singapore : Longman Singapore Publishers (Pte) Ltd.

3. Barlex D. & Kimbell R. (1986). CDT. Projects and Approaches. London : MacMillan.

4. Design Council Working Party. (1984). Design Education at Secondary Level (Lucas Report). London : Design Council.

5. Dunn S. (1986). An Introduction to Craft, Design and Technology. London : Bell and Hyman.

6. Williams, P. H. M. (1985). Teaching Craft, Design and Technology : Five to Thirteen. London : Croom Helm.

7. Yarwood A. & Orme, A. H. (1983). Design and Technology. London : Hodder and Stoughton.

COURSE TITLE : Teaching of Art in Secondary Schools (this syllabus includes a built-in component of an additional 30 hours for Microteaching)

DURATION : 60 hours

LECTURER : Mr Sim Tong Khern (Coordinator)

RATIONALE : The learning of art has four major aspects. These are:

1. Seeing and feeling visual relationship.
2. The making of art.
3. The study of works of art from the past and present.
4. The critical evaluation of art products.

The goal of art education is the development of these aspects of learning.

OBJECTIVES : The objectives of the course are:

1. to familiarize student teachers with the concepts and purpose of art education in the secondary school.
2. to identify the role and responsibilities of the secondary school art teacher.
3. to help guide and formulate art methodologies that will facilitate in the learning processes mentioned above.
4. to help student teachers understand the nature of art and the creative process so as to enable them to make intelligent visual aesthetic judgements.
5. to help in the formulation of a personalized art philosophy through theory and practice.

CONTENT : <u>Learners</u>

1. The aims and purpose of art education which will include

- basic philosophy of art and art education
- art education in Singapore
- recent development and implementation of art programmes

2. Understanding child art

Methods

3. Art pedagogy:

- the teaching of drawing
- the teaching of design
- the teaching of colour
- the teaching of sculpture
- the teaching of printmaking
- the teaching of ceramics
- the teaching of lettering
- the teaching of handicrafts
- the teaching of art history and appreciation

Curriculum

4. Planning and developing an art programme.

5. Study of:

- Ministry of Education Art Syllabuses
- GCE 'O', 'A', 'N' and Art Elective syllabuses
- CDIS materials

Evaluation

6. Formulating criteria for marking the various areas of art work namely:

- drawing and painting
- design
- 3-dimensional art and crafts
- objective type questions
- essay type questions

7. Assessing works in progress.

Learning Environment

8. Organising and managing art lessons.

ASSESSMENT : The course will be assessed by one written assignment related to the teaching of any <u>one</u> of the following:

- Drawing and Painting
- Design
- 3-dimensional art
- Handicrafts
- Art Appreciation

This will be an investigation of the area selected based on reading, literature review, gathering of information from microteaching, school feedback, and practical involvement in studio work.

REFERENCES :

1. Chapman, L. H. (1978). Approaches to Art in Education. Harcourt Brace Jovanovich, Inc. (N 362 Cha).

2. Eisner E. & Ecker D., (1966). Readings in Art Education. Blaisdell. (R/N85 Eis)

3. Hausman, J. J. editor. (1980). Arts and the Schools. New York : McGraw-Hill Book Co. (NX 304 Art)

4. McFee, J. K. & Degg, R. M. (1977). Art, Culture, and Environment - a catalyst for teaching. Belmont, California : Wadsworth Pub. Co. Inc. (N 85 Mac)

COURSE TITLE : Teaching of Music in Secondary Schools

DURATION : 60 hours

LECTURERS : Mr Robert Henderson
Mr Chia Wei Khuan

OBJECTIVES :

1. To review aims and concepts of music education.
2. To acquire knowledge of choral repertoire and music literature for the implementation of the Secondary Music Syllabus.
3. To upgrade vocal skills.
4. To conduct singing lessons at Secondary level.
5. To present stimulating appreciation lessons.
6. To teach aural training, harmony, history of music, form and analysis in Music Elective Schools (CSO1 only).
7. To understand the basic psychology in music learning.
8. To upgrade knowledge of music evaluation.

CONTENT : <u>Curriculum/Syllabus</u>

1. Music in the life of man - aesthetic and functional aspects.
2. Secondary song repertory - selected folk songs of the world, art songs, choruses from operas and oratorics, teenage songs.
3. Composers and their works - representatives in periods and styles in Western music.
4. Asian music works - selected Chinese, Indian, Indonesian and Polynesian works.
5. 'O' and 'A' levels Music examinations requirements - analysis of set works, harmony, aural training and general music knowledge (for CSO1 only).

Teaching Method

6. Vocal technique - voice production, exercises and warm-ups, vocal problems and remedies.

7. Approach to sight singing - comparison of solfege, tonio-solfa, 'figure' notation and staff notation.

8. Conducting - conductor's role and basic technique, rehearsing and conducting at performance.

9. Approach to music appreciation.

Learners

10. Psychology of music learning - music memory, the gifted and the slow learner, individualised instruction and group activities.

Evaluation

11. Music testing, aural and vocal feedback, evaluation at rehearsals.

Learning Environment

12. Music environment in the secondary school, in Music Elective schools and in junior colleges.

ASSESSMENT : (a) Assignment for CSO1 Music

During school attachment, identify one problem area in the teaching/learning of (a) vocal/choral or (b) instrumental programme to make recommendation for improvement with try-out to be conducted in classroom situation.

(b) Assignment for CSO2 Music

To present bibliography notes on 20 books on music teaching and music education and to plan a ten-week teaching scheme for a secondary class and music area of own choice.

REFERENCES : 1. Butenschon, S. & Borchgrevink, M. (1982). Voice and Song. Cambridge : Cambridge Univeristy Press.

2. Cowell, R. (1970). The Evaluation of Music Teaching and Learning. New Jersey, Englewood Cliffs : Prentice-Hall.

3. Politoske, D.T. (1979). Music (2nd edition). New Jersey, Englewood Cliffs : Prentice-Hall.

4. Singapore Ministry of Education. Music Syllabus for Secondary Schools and Syllabus for Music Elective Programme.

5. Thompson, D. (1982). Choral System. (Teacher's and Pupils' Manuals). Morristown, New Jersey : Silver Burdett.

6. Thomson, W. (1978). Music for Listening. New Jersey, Englewood Cliffs : Prentice-Hall.

4 FOUNDATION STUDIES

. Principles of Educational Practice - PEP(E)

. Educational Studies Elective - ESE

COURSE TITLE : Principles of Educational Practice - PEP(E)

DURATION : 90 hours

LECTURER : Dr S Gopinathan

RATIONALE : To provide student teachers with the key educational principles required for the intelligent performance of the roles required of them as teachers.

OBJECTIVES :

1. To provide student teachers with the fundamental educational theories and principles that underlie teaching practices.
2. To develop the ability to apply the principles appropriately in a variety of teaching situations.
3. To develop the attitudes and beliefs necessary to foster learning, nurture talent and promote desirable attitudes among children of different abilities, ethnic groups and socio-economic status.

CONTENT : The content is organized under the following five themes:

1. Pupils and Learning
2. Teacher and Teaching
3. Content and Curriculum
4. Objectives and Evaluation
5. School and Society

ASSESSMENT : By assignment and examination.

REFERENCES :

1. Child, D. (1981). Psychology and the Teacher. Eastbourne : Holt, Rinehart and Winston.
2. Downey, M. & Kelly, A.V. (1979). Theory and Practice of Education (2nd ed). New York: Harper and Row.
3. Goh Keng Swee et al (1978). Report on the Ministry of Education. Singapore : Ministry of Education.

4. Hurst, P. H. & Peters, R. S. (1970). The Logic of Education. London : Routledge and Kegan Paul.

5. Robinson, R. (1981). Perspectives on the Sociology of Education. London : Routledge and Kegan Paul.

# EDUCATIONAL STUDIES ELECTIVES - ESEs

## 1. Main Objectives of ESEs

1.1 To enable student teachers to select an area of professional interest for in-depth study.

1.2 To enable them to relate principles and theories to practice in teaching situations through both course work and classroom-based as well as school-based project work.

## 2. Structure of the ESE Courses

The course is of 60 hour duration. The first 30 hours of the course in Term 2 will be mainly for instruction and discussion. The remaining 30 hours in Terms 3 and 4 are provided as time for student teachers to consult the lecturers on the writing-up and presentation of the project. In most instances they will be required to collect data for their projects during Teaching Practice.

## 3. Assessment of the ESE Project

Upon completion of the course, the student teachers will be assessed in accordance with the requirement of projects as specified by the lecturers of the respective courses. In most cases they are required to submit an essay of about 3000 words.

## 4. Selection of ESEs

A total of 10 electives will be offered in Term 2. The electives are organised under 5 themes, namely:

4.1 Pupils and Learning

4.2 Teacher and Teaching

4.3 Content and Curriculum

4.4 Objectives and Evaluation

4.5 School and Society.

COURSE TITLE : Cognitive and Social Development of Adolescents

DURATION : 60 hours

LECTURER : Dr Seng Seok Hoon

RATIONALE : It is essential that teachers preparing for a career in secondary school be sensitised to the intellectual and social processes that occur in the development of adolescence. The reasons behind this are of course numerous but two crucial ones that emerge are:

1. For meaningful learning and instruction to take place on the part of teachers, certain guidelines be studied indicating when and how adolescents appreciate and understand higher order concepts and principles in the various secondary school subjects.

2. Intellectual development does not proceed alone but in harness with social, emotional and moral factors and so there is a need to examine the relationships between these processes. It is with these reasons in mind that the present course has been constructed and it is hoped its study will stimulate student teachers who attend the course to carry out guided studies of their own into adolescence, when they have consolidated their experience in secondary schools.

OBJECTIVES :

1. To trace briefly the early processes of children's intellectual development as an essential background to the study of adolescence.

2. To develop an understanding of the nature of adolescent thinking.

3. To study in depth the processes of intellectual adolescent development in the context of selected psychological frameworks e.g. Piaget, Bruner, Kohlberg, etc.

4. To consider the social, moral and cultural influences that relate to the processes of intellectual development in adolescence.

5. To relate the above to improved levels of learning and teaching in the context of Singapore schools.

6. To prepare student teachers in the elementary procedures of carrying out research in secondary school classrooms.

CONTENT : The course will be practically based but the student teachers will be required to carry out preparatory reading for each session. It is hoped to cover the following areas:

1. Ways and means of studying adolescent development in schools and colleges; use of observational and interview techniques, methods of recording and interpreting data, etc.

2. Brief overview of the main approaches to the study of human development with reference to adolescence.

3. Detailed consideration of the cognitive developmental theories of Piaget, Bruner and Kohlberg.

4. Social developmental perspective to the study of adolescence - interpersonal awareness and friendship patterns.

5. Factors affecting the intellectual, social and moral development of adolescents.

   (a) Parental influences in the development of adolescence.

   (b) Societal pressure and stress on adolescent achievement.

   (c) Group norms, attitude formation and change as they affect adolescent thinking.

6. Relating intellectual, social and moral development of adolescents to teaching and learning in Singapore schools. This section will include a discussion of the common and unique demands of various subject disciplines in the secondary school, how teachers can meet the challenges of teaching and guiding pupils from different cultural contexts, etc.

ASSESSMENT : A practical investigation into some aspect of adolescent development with reference to schooling.

REFERENCES :

1. Adelson, J. (1980). Handbook of Adolescent Psychology. Wiley.

2. Crain, W.C. (1980). Theories of Development, Concepts and Application. Prentice-Hall Inc.

3. Floyd, A. (1979). Cognitive Development in the School Years. Croom Helm.

4. Mussen, P.H., Conger J.J. & Kegan J. (1980). Readings in Child and Adolescent Psychology. Contemporary Perspectives, Harper Row.

5. Selman, R.L. (1980). The Growth of Interpersonal Understanding. Academic Press.

COURSE TITLE : Helping Adolescents with Learning Problems

DURATION : 60 hours

LECTURERS : Dr Ko Peng Sim
Dr Lily Wong

RATIONALE : The assumption underlying this course is that pupils with learning problems can be helped to overcome their problems provided the teacher is sensitive to her pupils' needs, is willing to help them, and has chosen appropriate strategies in the process of helping them cope with their problems. The focus, however, will be on pupils of average and near to average ability. These pupils can be found in ordinary secondary schools.

It is anticipated that most of the student teachers taking this course have no previous teaching experience. They may not be aware of the nature of learning problems faced by pupils, and the type of provisions that have been made by some of the schools in their effort to help these pupils. A large part of the course, therefore, will be devoted to what have actually taken place in local secondary schools.

OBJECTIVES : It is hoped that at the end of the course, the student teachers will

1. have acquired some knowledge about the nature of learning problems faced by our secondary school pupils and the type of provisions that have been made by some of the schools;

2. be able to suggest appropriate strategies to help pupils cope with specific learning problems;

3. have opportunity to help some of the pupils who have learning problems to overcome their difficulties by applying the strategies they learned from the course, or by trying out new strategies.

CONTENT : 1. Pupils with learning problems

- Who are they?
- How do they perceive themselves?
- How do others perceive them?

2. Understanding pupils' learning process

- How do pupils learn?
- Why do some pupils fail to learn?

3. Identifying and diagnosing pupils' problem area

- How does the teacher know whether a pupil has learning problem?
- How can a pupil's specific problem area be assessed?
- What common learning problems do secondary school pupils encounter?

4. Helping pupils cope with learning problems

- What help can the teacher offer when pupils have learning problems?
- What provision have schools made for pupils who have problem in specific subject area?
- What role can parents, professionals and community play to help pupils learn better?
- What contributions can research make towards the effectiveness of remediation or intervention strategies?

ASSESSMENT : By assignment.

REFERENCES :

1. Galloway, D. (1985). Schools, pupils and special educational needs. London : Croom Helm. (LC 4803 Gre.G)

2. Weber, K. (1982). The Teacher is the Key : A Practical Guide for Teaching Adolescent with Learning Difficulties. The Open University Press. (LC 4661 Web)

3. Widlake, P. (1983). How to Reach the Hard to Teach. Open University Press. (LB 1629.5 Gre.W)

COURSE TITLE : Managing Classroom Interaction

DURATION : 60 hours

LECTURER : Staff of Department of Educational Psychology

RATIONALE : Transactional processes in the classroom warrant the attention of teachers as they are considered the most influential classroom participants. Although the teacher has the immediate responsibility of instructing his pupils, there are other responsibilities that he has to attend to before the classroom can become a conducive environment for learning. For example, the social, emotional and psychological pre-disposition of the pupils can affect how a teacher and his class will behave. This suggests that a knowledge of or an awareness of youth culture and recent or current social phenomena will help the teacher to organize and manage interaction processes in and out of the classroom in a small group, mass and individualized situation effectively.

OBJECTIVES : This course aims at creating an environment that highlights important group processes, individual and inter-personal relationships, personalities and personal styles so that participants would know and experience internal and external forces at work. The knowledge, awareness and experience would enable student teachers

1. to be sensitive to the interactional forces prevalent in the classroom.

2. to examine the teacher-curriculum, social-cultural and pupil related factors affecting interaction processes and how these influence school achievement, character development, social relationships, etc.

3. and lastly, to study systematically the implications an understanding of the dynamics of group behaviour has on teaching.

CONTENT : 1. Social, cultural and psychological explanations of

- the teaching-learning context
- group formation
- group management and control.

Highlighting the following areas:

(a) perceptions; expectations and prejudice

(b) peer-group influence

(c) verbal and non-verbal behaviour

(d) leadership and styles of leadership

2. Problem-solving approaches from the perspective of the teacher needing assistance:

(a) styles of teaching

(b) management and behaviour modification strategies

(c) short-term and long-term schemes

3. Approaches and techniques of studying classroom interaction processes :

(a) Bales : observation of individuals in a group setting

(b) Flanders : interaction analysis categories

(c) Clinical approaches : inventories, scales, tests.

ASSESSMENT : By project (school/classroom based study)

REFERENCES : 1. Delamont, S. (1984). Readings on Interaction in the Classroom. London: Methuen Publishers. (LB 1033 Rea)

2. Downey, M. & Kelly, A.V. (1979). Theory and Practice of Education. Chapter 1, pp 1-22, Harper and Row Ltd.

3. Robertson, J. (1981). Effective Classroom Control. Hodder and Stoughton, London : Studies in Teaching and Learning Series.

4. Schmuck, R. & Schmuck, P. (1975). Group Processes in the Classroom. Iowa: W.M.C. Brown Co. (LB 1032 Sch)

COURSE TITLE : Strategies for Effective Teaching and Learning

DURATION : 60 hours

LECTURER : Dr Agnes Chang Shook Cheong

RATIONALE : Lately there has been increasing interest in instructional theory, the purpose of which is to provide the teacher with systematic teaching approaches. These approaches are founded on learning principles, to achieve the goal of the teaching process which is student learning. The more closely instructional or teaching theory is bound to learning principles, the more likely it is that the teacher will accomplish his goals.

The emphasis of the course will be on secondary school learning and teaching. The teacher in the classroom ought to be acquainted with at least some aspects of pupil learning. Hence the course provides an opportunity for student teachers to critically review selected empirical studies on learning and teaching in the classroom, and possibly, to replicate some of these studies in their assignment to investigate the learning of Singapore children.

OBJECTIVES :

1. To examine the basic issues in the study of learning;
2. To understand the various mechanisms that are crucial to learning; and
3. To understand the integration of teaching and learning theories in classroom practices.

CONTENTS :

1. <u>Learning in teaching</u>

   1.1 Major factors contributing to success or failure in learning:

   (a) the student
   (b) the home
   (c) the teacher
   (d) the school
   (e) peers
   (f) the curriculum

   1.2 The many roles of a teacher.

1.3 Applications of Learning Theories in the classroom, the staff room and PTA.

2. A Critical Review of Selected Empirical Studies of Teaching and Learning in the Classroom

2.1 Classroom dynamics

2.2 Motivation in the classroom and beyond

2.3 Classroom climate

2.4 Attributions to success and failure in achievement

2.5 Time-management, planning and decision-making

ASSESSMENT : A study based on any one aspect of teaching and learning in the classroom.
The assignment should not exceed 3000 words.

REFERENCES :

1. Anderson, C.S. (1982). The search for school climate : A review of the research. Review of Educational Research 52, 3, 368-420.

2. Chang S.C. (1983). The Impact of Home and School on Adolescent's Attitudes. Unpublished Ph. D. thesis, Macquarie University, Sydney.

3. Hergerhahn, B.R. (1976). An Introduction to Theories of Learning. Prentice Hall.

4. Walberg, H.J. (1979). Educational environments and effects. Berkeley, California : McCutchen.

COURSE TITLE : Helping the Adolescent through Guidance and Counselling

DURATION : 60 hours

LECTURERS : Miss Vilma D'Rozario
Dr Esther Tan

RATIONALE : Student teachers need to have an understanding of the social and emotional needs of adolescents as well as the nature and causes of common youth problems. They also need guidance techniques and counselling skills to help pupils who have emotional and behavioural difficulties.

OBJECTIVES : Upon completion of the course the student teachers will be able to:

1. provide guidance to pupils to enhance their self-concept, develop their self-understanding and help them cope with school adjustment.

2. conduct group guidance activities in the classroom to promote group interaction and communication.

3. identify, assess and help individual pupils with emotional and behavioural problems.

4. tap community resources in helping pupils with problems.

CONTENTS : 1. Introduction

- Overview of the course
- Understanding adolescent development
- Issues in adolescent development

2. Identification of Adolescent Needs and Problems

- Non-standardized techniques: observation, interview, survey
- Standardized techniques: selection, administration and interpretation of instruments

3. Meeting Adolescent Needs Through Group Guidance Activities

. What is group guidance?
. Techniques in group guidance

4. Career Guidance

. What is career guidance?
. Conceptual framework of a careers education programme
. Career guidance activities

5. The Helping Relationship in Counselling

. The nature of the helping relationship and the effective helper
. Basic counselling skills in the helping process

6. The Case Study Approach in Pupil Guidance and Counselling

. Counselling techniques in working with individual pupils
. Case recording
. Case referral

7. Working with Parents and Tapping Community Resources

. Skills in parent conferencing and home visits
. Organising parent-school activities
. Using community resources

ASSESSMENT : By project.

REFERENCES :

1. Nelson-Jones, R. (1983). Practical Counselling Skills : A Psychological Skills Approach for the Helping Professions and for Voluntary Counsellors. London : Holt, Rinehart and Winston. (BF 637 Nel)

2. Pietrofesa, J., Hoffman, A., & Splete, H. (1984). Counselling. Boston : Houghton Mifflin. (BF 637 Cou.P)

3. Tan, Esther. (1983). Counselling Pupils. Singapore: Institute of Education. (BF 637 Cou.T)

4. Tan, Ngoh Tiong (ed). (1984). Handbook on Counselling. Singapore : Counselling and Care Centre. (BF 637 Cou.H)

5. Yeo, A. (1983). A Helping Hand. Singapore: Counselling and Care Centre. (BF 637 Cou.I)

6. Yip, K. et al. (1986). A Guide to the Guidance and Counselling of Pupils. Singapore: Institute of Education.

COURSE TITLE : Moral Education in Singapore : Curriculum Issues

DURATION : 60 hours

LECTURER : Dr Tan Tai Wei

RATIONALE : It is assumed in the Singapore Secondary Moral Education Curriculum that the study of religion and religious morality at Secondary Three and Four will complement a secular moral education given to pupils up to Secondary Two. This assumption needs to be examined.

OBJECTIVES : This course aims at an understanding of the reasons that can be given for this assumption, and of how the teaching of the several world religions included in the curriculum can contribute to moral learning.

CONTENT :

1. The possibility and nature of a secular morality, discussed by reference to the Being and Becoming programme taught up to Secondary Two.

2. The relationship between morality and religion, and how religion enhances moral understanding and practice.

3. The nature of world religions, discussed by reference to the Secondary Three and Four religious studies texts.

4. The nature of the various religious moralities, their similarities and differences, compared both among themselves and with desirable secular moralities.

5. The possibility of deriving a desirable morality for living in Singapore based on common basic religious and secular values.

6. Methodological principles for teaching secondary pupils religion, and religious and moral values.

ASSESSMENT : By project : An essay of 2500 - 3000 words showing reflective understanding of one or two aspects of moral and religious beliefs and how these may be translated into subject matter and ways of teaching in the classroom.

REFERENCES :

1. CDIS. Secondary Three and Four Text Books on Religious and Confucian Ethics.

2. Peters, R.S. (1973). Reason and Compassion. London: Routledge and Kegan Paul, Lecture One and Two.

3. Smart, N. (1976). The Religious Experience of Mankind. N.Y.: Charles Scribner's Sons.

4. Excerpts from the 'scriptures' of the various world religions will be provided.

COURSE TITLE : Design for Learning

DURATION : 60 hours

LECTURER : Dr Chen Ai Yen (Coordinator)

RATIONALE : This course aims at developing the student teachers' understanding and skill in the application of the latest learning, instructional and motivational theories to the design of learning for themselves and their pupils. It provides practical experience in designing the learning activities in systematic reading, purposeful self-directed study, meaningful discussion and observation during 'laboratory' or field situations. It also provides opportunities for evaluation and inquiry into the worthwhileness of the learning experience using either quantitative or qualitative methods.

OBJECTIVES : The student teacher should be able to

1. Understand the learning and instructional models, motivational theories and experiences that guide various approaches to the design for learning.

2. Apply the appropriate learning, instructional and motivational theories and previous learning experiences to the design of self-directed or team learning activities or programme(s) for himself or herself or the pupils in schools or learners in non-formal learning situations.

3. Implement the planned activities and/or programme(s).

4. Evaluate the effects of (3) upon the student teacher/pupils' performance, and attitude towards planned self study and team learning.

CONTENT : 1. Nature and scope of design for learning

- patterns and forms of learning
- the basics of design
- macro and micro learning system design
- practice design

2. The role of motivation and involvement in self-directed and team learning.

3. Various environmental and human factors which influence the design and implementation of different systems and forms of learning associated with successful projects and learners of all ages.

4. Implications of the designs for course design and implementation.

5. Quantitative and qualitative methods used to evaluate the design, patterns and results of self-directed or team learning.

ASSESSMENT : A case study which describes and evaluates the design, implementation and results of the self-directed or team learning activities in real life situations e.g. at IE or in the schools. It should also make some realistic recommendations for replication in similar learning situations.

REFERENCES :

1. Boud, D., Keogh, R. & Walker, D. (1985). Reflection : Turning Experience into Learning. New York : Kogan Page.

2. Eggen, P.D. & Kauchak, D.P. (1988). Strategies for Teachers : Teaching Content and Thinking Skills. 2nd Ed. New Jersey : Prentice-Hall.

3. Fenstermacher, G.D. & Solties, J.F. (1986). Approaches to Teaching. New York : Columbia Teachers' College Press.

4. Joyce, B. & Weil, M. (1980). Models of Teaching. 2nd Ed. New Jersey : Prentice-Hall.

5. Kolb, D.A. (1984). Experiential Learning. New Jersey : Prentice Hall.

6. Marton, F., Hounsell, D. & Entwistle, N. (1984). The Experience of Learning. Edinburgh : Scottish Academic Press.

7. Philips, D.C. & Solties, J.F. (1985). Perspectives on Learning. New York : Columbia Teachers' College Press.

8. Romiszowska, A.J. (1983). Designing Instructional Systems. New York : Kogan Page.

COURSE TITLE : Evaluating Cognitive and Affective Learning

DURATION : 60 hours

LECTURER : Mr Peter Lam

RATIONALE : Cognitive and affective measures are important for student teachers to evaluate learning outcomes. It is necessary to develop knowledge and skills in these areas so that they are prepared to handle achievement tests, attitude scales and questionnaires with reference to the objectives and contents of the school curriculum.

OBJECTIVES : By the end of the course, the student teachers will be able to:

1. evaluate, select and use appropriate tests for gathering information pertaining to pupils' cognitive and affective learning.

2. organise and interpret the information for better understanding of pupil learning.

CONTENT :

1. Roles of Evaluation in the School

   . Necessity of evaluation in teaching and learning.
   . Bloom's taxonomies of educational objectives : cognitive and affective domains.

2. Instruments for Cognitive Measurement

   . Standardized and teacher-made tests of achievement.
   . Norm-referenced and criterion-referenced approaches.

3. Instruments for Affective Measurement

   . Attitude scales
   . Questionnaires

4. Evaluation of Measurement Instruments

   . Description of purpose and nature of instrument.
   . Practical evaluation.

. Technical evaluation.
. Summary evaluation: strengths and weaknesses.

5. Elementary Statistics Used in Educational Measurement and Evaluation

. Measures of central tendency
. Measures of variation
. Measures of relationship
. Tests of significance

6. Evaluating Instructional Effectiveness

. Course objectives
. Table of specifications
. Analysis of test results for evaluating teaching and learning.

ASSESSMENT : By project.

REFERENCES :

1. Anastasi, A. (1982). Psychological testing, 5th ed. New York: Macmillan. (BF 431 Ana)

2. Fitz-Gibbon, C.T. & Morris, L.L. (1978). How to design a program evaluation. Beverly Hills: Sage. (LB 2823 Fit)

3. Gronlund, N.E. (1985). Measurement and evaluation in teaching, 5th ed. New York: Macmillan. (LB 3051 GRO)

4. Mehrens, W.A. & Lehmann, I.J. (1984). Measurement and evaluation in education and psychology, 3rd ed. New York: Holt, Rinehart and Winston. (LB 1131 Meh)

COURSE TITLE : The Social Context of Teaching and Schooling

DURATION : 60 hours

LECTURER : Dr Leslie Sharpe

RATIONALE : An understanding of the social context within which the school functions is prerequisite for teachers to interpret policies, to identify their roles, to select activities, and to respond constructively to changes in education.

This course aims to provide an in-depth study of the process of schooling, to systematically find out what goes on in the school and in the classroom and to explain the complexity of pupil performance in school.

OBJECTIVES : This course will enable the student teachers to:

1. understand the current issues concerning schooling, linking the classroom and the school with society;
2. recognize the significant relationships between home background, school environment, and pupils' educational performance;
3. acquire the skills in conducting independent investigations/studies on selected aspects of teaching and schooling.

CONTENT :

1. An Overview of the Development of Sociology of Education
2. The Home and the School: Home Background and Pupils' Educational Achievement
3. The School as a Community and Social Organization
4. The Sociology of the Classroom: Ethnography of the Classroom and Classroom Control
5. Changes in the Status and Role of the Teacher
6. Methods of Social Enquiry: Social Surveys, Correlational Studies, Case Studies.

ASSESSMENT : A project of about 3000 words on an issue relating to teaching and/or schooling based on systematic investigation and critical analysis.

REFERENCES :

1. Douglas, J.W.B. (1964). The Home and the School. London : McGibbon and Kee.

2. Feinberg, W. & Soltis, J.F. (1985). School and Society. Columbia University, Teachers College Press.

3. Meighan, R. (1986). A Sociology of Education. London : Holt, Rinehart and Winston.

4. Reid, I. (1978). Sociological Perspectives on School and Education. UK : Open Books.

5. Robinson, P. (1981). Perspectives on the Sociology of Education: An Introduction. London : Routledge and Kegan Paul.

6. Rutter, M. et al. (1979). Fifteen Thousand Hours: Secondary Schools and Their Effects on Children. UK : Open Books.

COURSE TITLE : Problems and Issues in Singapore Education: Comparative, Sociological and Historical Perspectives

DURATION : 60 hours

LECTURER : Dr S Gopinathan

RATIONALE : Education in Singapore has been undergoing development and change at a dynamic pace. To know, understand, and work within this process of development and change, student teachers ought to have an appropriate perspective and framework for viewing and coming to grips with the problems and issues relating to education in Singapore. The perspective and framework will be provided through socio-historical and, where relevant and useful, comparative analyses of the problems and issues.

OBJECTIVES :

1. To stimulate an intelligent interest in systematically
   (a) examining educational development in Singapore
   (b) analysing its problems and issues
2. To enable student teachers to relate education problems and issues to the historical and societal context.
3. To enable student teachers to attain a clearer understanding of educational development, problems and issues in Singapore from the perspective of socio-historical and comparative studies.
4. To provide opportunities to student teachers to identify significant educational problems related to educational development, analyse them in historical and comparative terms, where relevant and useful, and arrive at conclusions which indicate an understanding of the problems.

CONTENT :

1. Frameworks for Examining Educational Issues
2. Development of Education in Singapore: An Overview

3. Post-War Developments in Singapore Education: A Review of Key Education Reports

4. Moral Education in a Plural Society: Concerns, Policies, Programmes and Issues

5. The Technological Imperative in Singapore Education: Education and Work Relationships Reviewed

6. Control and Autonomy in Education: A Review of Towards Excellence in Schools

7. Selection and Gender Issues in Singapore Education

8. Minority Education in a Plural Society: Concerns, Policies, Programmes, Issues

9. Introduction to Educational Research Methodology.

ASSESSMENT : Student teachers will do a project centred on the study of an educational problem or issue relating to educational development in Singapore. Where appropriate, the study may be done in socio-historical terms or in comparative terms in that variables from other educational systems may be used to illustrate and clarify aspects of the problem or issue.

REFERENCES :

1. Gopinathan, S. (1985). "Education" in Quah, Chan and Seah (eds). Government and Politics of Singapore. Singapore: Oxford University Press.

2. Gopinathan, S. (1986). "Education in Singapore; 1959-1984" in Ng Cheng Wang (ed). Singapore: Taking Stock. Singapore : Federal Publications.

3. Ministry of Education. (1987). Towards Excellence in Schools.

4. Postlewaithe, N. & Thomas, M. (eds). Education in Asean. Pergamon Press.

5. Seah Chee Meow & Seah, L. (1983). "Education Reform and National Integration" in P. Chen (ed.) Singapore: Development Policies and Trends. Singapore : Oxford University Press.

6. Wilson, N.E. (1978). Social Engineering in Singapore: educational policies and social change 1819-1972. Singapore: Singapore University Press.

COURSE TITLE : Home and School

DURATION : 60 hours

LECTURER : Dr Jay Yap

RATIONALE : That the home constitutes a significant factor in the total socialization process and the school attainment of a child is a fact which few would want to dispute today. Yet, in the Singapore context little emphasis has been placed so far on the development of an effective, ongoing liaison between parents and the school - a situation reflected in the conspicuous dearth of research in this particular dimension of teaching and schooling in Singapore.

The development and maintenance of an effective home-school link can no longer be seen as an 'optional extra' for schools today. - The theoretical basis, the issues and the practical considerations underlying such a position are explored and examined in this course.

OBJECTIVES : This course seeks to help student teachers

1. understand the relationship between the home and the school as agencies of socialization;
2. examine the empirical and theoretical basis for a home-school link;
3. explore the practical considerations involved in the establishment and maintenance of such a link, with particular reference to the Singapore context;
4. acquire some basic skills necessary for the conducting of independent research on aspects of home-school liaison in Singapore schools.

CONTENT :

1. The Socialization Process in Perspective
2. Relationship between the Home and the School as Agents of Socialization
3. Survey of Literature on 'Home and School' - and Related Issues

4. The Theoretical Basis for a Home-School link

5. The State-of-the-Practice of Parental Involvement in a Selected Number of Countries, as Exemplars

6. Getting Started in Singapore, and Barriers to Parental Involvement

7. Research Methods for Social Inquiry

ASSESSMENT : An independent school-based inquiry that would contribute to the better understanding and development of home-school liaison in Singapore.

REFERENCES :

1. Bartiani, J. (1987). Parents and Teachers: Perspectives on Home-School Relations. Windsor, Berkshire: NFER-Nelson.

2. Berger, E. (1983). Beyond The Classroom: Parents as Partners in Education. Missouri: Mosby Company.

3. Collins, C. et al. (1982). The Home-School Connection. Boston: Institute of Respensive Education.

4. Craft, M. et al. (1980). Linking Home and School: A New Review. London: Harper & Row.

5. Cullingford, C. (ed.) (1985). Parents, Teachers and Schools. London: Robert Royces.

6. Douglas, W.B. (1971). The Home and The School. Panther.

7. Robinson, P. (1981). Perspectives on the Sociology of Education: An Introduction. London: Routledge and Kegan Paul.

COURSE TITLE : Using Pupil Learning Styles to Maximize Instructional Effectiveness

DURATION : 60 hours

LECTURER : Dr Yeap Lay Leng

RATIONALE : Recent interest has focused on learning styles as another dimension of individual differences. The high attrition rates, the great concern to fully develop any special talents in an individual, the need to find out why some pupils are not progressing, and the efforts to help pupils stretch to the limits of their academic abilities, are some of the stronger reasons as to why teachers need to know how pupils learn.

OBJECTIVES : Student teachers will

1. be aware of the range of definitions, theories and interpretations of learning styles.
2. be aware of research trends, issues and the findings.
3. be able to use measuring instruments on learning styles.
4. be able to apply learning style research findings to classroom instruction.

CONTENT :

1. Overviews and questions concerning learning styles: e.g. what and why of learning styles, can pupils identify their own learning styles? Do different pupils have different styles? Does teaching through pupils' learning styles increase academic achievement?
2. Trends and issues in learning styles research, their interpretations and applications of the findings to classroom instruction.
3. Examples and interpretation of learning style models by advocates of learning style based education e.g. Dunn, Dunn & Price, Gregorc, Hunt, Kolb, Schmeck, Gordon, McCarthy's 4MAT System, and Torrance.

4. Ways to assess learning styles e.g.:

   Learning Styles Inventory (Dunn, Dunn & Price, 1985); Cognitive Laterality Battery (Gordon, 1986); Learning Style Inventory (Kolb, 1976); Your Style of Learning and Thinking (Torrance, Reynolds, Riegel and Ball, 1976); Embedded Figures Test (Witkin, 1969).

5. Implications of learning style diagnosis: development of educational approaches, evaluation, development of activities.

6. Classroom applications of learning style profiles: practices and limitations, applying the principles of learning and teaching styles, matching teaching and learning styles, developing a curriculum for such matching.

ASSESSMENT : A written assignment on one of the following areas: the diagnosis of learning styles, practical applications of learning styles, developing a curriculum to match pupils' learning styles, matching teaching and learning styles.

REFERENCES :

1. A compilation of articles by the Learning Styles Network (n.d.) Jamaica: The Center for the Study of Learning & Teaching Styles.

2. Guild, P. B., and Garger, S. (1985). Marching to different drummers. Alexandra: Association for Supervision and Curriculum Development [ASCD].

3. National Association of Secondary School Principals (1982). Student Learning Styles & Brain Behaviour. Reston: NASSP.

Note: No call numbers are provided as IE library is in the process of purchasing materials on learning styles.

5 PERSONAL DEVELOPMENT STUDIES

- Oral Communication - OC
- Information Technology in Education - ITE
- Managing Extra-Curricular Activities - MECA
- Social and Moral Issues - SMI
- Civil Defence - CD

COURSE TITLE : Oral Communication (English)

DURATION : 40 - 60 hours

LECTURER : Mr Clive Scharenguivel (Coordinator)

RATIONALE : The teacher is above all a communicator. Communicating with rather than talking at a class is the keynote of the successful teacher. Voice and Speech exercises aim to increase the liveliness and effectiveness of the communication. The Phonetics component provides a tool for ear training and precision in pronunciation and stress. The skills learnt will be applied in teaching tasks such as presentation of talks, reading aloud, explaining concepts, giving instructions etc.

OBJECTIVES : At the end of the course the student teachers should have the following communication skills:

1. ability to speak and read confidently and with good rhythm and expression.

2. ability to speak a clear and acceptable form of English that will cause neither ambiguity nor embarrassment.

3. ability to use personal and vocal skills as a convincing and effective classroom communicator.

4. ability to use the I.P.A. script for reference purposes.

CONTENT : 1. Basic Speech Skills (12 h)

(a) - The communication process, interpersonal communication, differences between personal communication and demands on a teacher in the classroom.

- Skills of relaxation, stance, breathing, voice production - resonance, projection, modulation and forward tone.

- Articulation and forward diction.

(b) - Introduction of resonator scale, formation and practice of vowel and consonant sounds.

- Organs of speech and use of tongue and lips to form these sounds.

- Ear-training and aural/oral discrimination and activities to develop and improve speech and voice e.g. interviews, group- introduction, short talks etc.

2. The Phonetics Component (8 h)

(a) - Introduction to 44 Phonemes of English. The use of phonetic symbols as a tool to help student teachers acquire accuracy in pronunciation and for reference purposes.

- Ear-training for aural/oral discrimination and practice in production of sounds and stress patterns in words and sentences.

(b) - The importance of word and sentence stress and intonation.

- The use of the schwa in weak syllables, linking 'r', elision, finals etc.

(c) - Correction of common local errors of pronunciation.

3. Communication Skills in the Classroom (20 h)

(a) - Reading a variety of prose passages and texts including notices, announcements, reports etc.

(b) - Giving instructions, explaining words and concepts, asking questions and developing questioning technique, presenting and introducing a speaker.

(c) - Practice in acquiring the above skills both in reading and in short prepared and impromptu talks on appropriate and relevant topics according to teaching areas.

4. Speech and Drama (for Language and Literature Students only) [Optional]

This section is offered to student teachers who are doing the CSO (Language) Course to enable them to use a wide range of teaching strategies in order to improve and enrich the teaching of language and literature in schools.

Topics and themes will include role playing, improvisation, dramatisation, choral speaking and reading aloud of prose and poetry.

A spiral approach will be used and as the skills develop they will be practised and applied throughout the course.

ASSESSMENT : At the end of each component or module the student teacher will be given a short oral progress test.

| | | | Marks |
|---|---|---|---|
| 1. | (a) | Reading of 20 words commonly mispronounced ) to be recorded on tape | 10 |
| | (b) | Reading of 20 words in phonetic script ) | 10 |
| | (c) | Reading/Recitation of 2 Jingles (Articulation & Tone) | 10 |
| | (d) | Reading a passage of their own choice (see Format) | 10 |
| 2. | Communication Skills | | |
| | (a) | Reading a passage aloud | 30 |
| | (b) | Speaking for 3 min to an audience on either a general topic or prepared presentation. | 30 |
| | | TOTAL | 100 |

Note

Lecturers are required to give individual diagnostic tests at the beginning of the course to inform and raise awareness in student teachers of individual weaknesses and to retest student teachers at the end of the first term to record progress. Student teachers should keep individual practice tapes on which they record practice exercises each week for homework.

REFERENCES :

1. Allen, S. (1964). Living English Speech. Longsman.

2. Burniston, C. (1970). Spoken English in Further Education (Revised Edition). London: Methuen Educational Ltd.

3. Burniston, C. (1987). Direct Speech. Methuen Ed. Ltd.

COURSE TITLE : Oral Communication (Chinese)

DURATION : 60 hours

LECTURER : Mr Teo Choo How

RATIONALE : It is important that graduate teachers of Chinese should themselves be models of Standard Mandarin. Unfortunately, the majority of the Chinese graduates from the local university do not speak Standard Mandarin. This course is specially designed to make student teachers aware of the nature of good Mandarin and to show how this might be attained.

OBJECTIVES :

(a) To provide student teachers with knowledge of Hanyu-Pinyin and to use it for teaching purposes.

(b) To enable student teachers to speak and teach Standard Mandarin.

CONTENT :

1. An introduction to Chinese pronunciation.

2. The vowels

   2.1 The definition of vowels

   2.2 The classification of vowels

   2.3 The pronunciation of vowels

   2.4 The errors and identification of errors

3. The consonants

   3.1 The definition of consonants

   3.2 The classification of consonants

   3.3 The pronunciation of vowels

   3.4 The errors and identification of errors

4. The combination of vowels and consonants

   4.1 The principles and methods of combination of vowels and consonants.

5. The pronunciation of "er" finals and retroflex ending "r".

   5.1 Methods of pronunciation

   5.2 Drills of examples

6. The four tones.

7. The neutral tones

   7.1 The rules

   7.2 The function

8. Change of Tone

   8.1 Change of tone in specific words

   8.2 Change of the third tone

9. Words with varied pronunciation

   9.1 Definition and classification

   9.2 Drills with examples

10. Methods of reading (aloud) with expression.

    10.1 Reading exercises

11. Analysis of errors in pronunciation.

ASSESSMENT : Oral tests and written assignments.

REFERENCES :

1. Na Zong-xun. (1968). Pronunciation in Mandarin. Taiwan.

2. Qi Tie-hen. (1973). A Study of Synonyms with Different Pronunciations. Taiwan.

3. Zeng Guo-tai. (1962). A Complete Work on "Po Yin Zi". Hong Kong.

4. Zhong Lusheng. (1968). Phonetics in Mandarin. Taiwan.

COURSE TITLE : Oral Communication (Malay)

DURATION : 30 hours

LECTURER : Mrs Kamsiah bte Abdullah

RATIONALE : All teachers are expected to be able to speak correctly and clearly. Their success as teachers depends to a large extent on their communicative ability. Hence, student teachers trained to teach the Malay Language should be able to speak the Standard Malay with correct pronunciation, intonation and stress. They should also be trained to communicate effectively in the language. They should be good models in speech for their pupils in the classroom.

OBJECTIVES : By the end of the course, student teachers should show

1. Improved ability to communicate with pupils in the classroom.
2. Ability to express themselves correctly and clearly when teaching.
3. Improvement in the pronunciation of Malay Language including rhythm, stress and intonation.
4. Confidence and competence in the teaching of the Malay Language.

CONTENT : 1. <u>Phonetics, Phonology and Morphology</u>

(a) Phonetic transcription

(b) Articulatory phonetics

(c) The organs of speech

(d) Classification of consonants and vowels

(e) Errors in Malay Language in phonetics, phonology and morphology

(f) Interference from dialects and other languages.

2. Oral Communication

Training of student teachers in the skills of speaking:

(a) Making short speeches - playing the role of a politician, a school principal, a chairman of a meeting, a guest-of-honour, etc.

(b) Delivering lectures - playing the role of a lecturer of history, a religious leader, and a candidate in an election.

(c) Making reports - to deliver reports of a meeting, seminar, a committee, an association, etc.

(d) Participating in debates, quizzes, dialogues, conversation and plays.

3. Language in the Classroom

(a) Asking questions.

(b) How to conduct effective oral activities in the classroom such as conversations, dialogues, interviews, plays, etc.

(c) The importance of teaching aids in the teaching of oral communication in the classroom.

ASSESSMENT : Progress ratings and tests.

REFERENCES :

1. Abdullah Hassan. (1980). Linguistik Am Untuk Guru Bahasa Malaysia. Kuala Lumpur: Fajar Bakti.

2. Awang Sariyan. (1983). Kesalahan Umum Penggunaan Bahasa Melayu. Kuala Lumpur: Sarjana Enterprise.

3. Awang Sariyan. (1984). Isu-isu Bahasa Malaysia, Petaling Jaya : Penerbit Fajar Bakti.

COURSE TITLE : Information Technology in Education

DURATION : 30 hours

LECTURERS : Dr Philip Wong (Coordinator)
Mr Peter Koh
Mrs Hazel Mah
Mr Poon Kum Heng
Mrs Angela Tan
Mr Tan Fong Khow
Mrs Tan Swee Chiew

RATIONALE : Computers are becoming important in our everyday lives. Computers are used for many purposes such as information processing and retrieval, delivery of instruction and communication. Thus, it is essential that people should know how computers function, what computers can do, and how computers can help to increase productivity.

In the past, schools have used computers mainly for computer-club activities and teachers have not used computers to aid in the preparation and design of teaching materials or for administration. The use of computers to deliver instruction is also an important area. It is therefore necessary for teachers to acquire the knowledge on the effective use of computer-based instructional materials efficiently in the classrooms. This course will introduce teachers to the use of computers in information retrieval and processing for instruction and administration.

OBJECTIVES : At the end of the course the student teachers should

1. have knowledge of computer vocabulary and understand basic computer architecture.

2. have a conceptual knowledge of recent developments in computer and information technology.

3. be able to use the computer as productivity tools as in word processing, preparation of teaching materials and school administration.

4. acquire skills in the evaluation, utilization, and integration of computer-assisted learning (CAL) materials in the school curriculum.

CONTENT :

1. Overview: Computer architecture, CPU, memory (RAM, ROM, bits, bytes), hardware, computer peripherals, disks, CD ROM, examples of computer languages (2 hours).

2. IT scenario: Network systems, Bulletin boards, Teleview, School Link, SHINE, BITNET, SBC Teletext (2 hours).

3. Application software: Demonstration of application software, expert systems (JOBS), artificial intelligence, intelligent CAL (2 hours).

4. Moral, philosophical, sociological and psychological issues of computing in Singapore: Copyright Laws, effects of computers on teachers, user friendly, automation (2 hours).

5. Disk Operating System (2 hours).

6. Hands-on experience

   (a) Word processing package(s) (6 hours)

   (b) Presentation package(s) (8 hours)

7. Selection, evaluation and integration of Computer-Assisted Learning (CAL) materials: Research on CAL, learning strategies, attributes of computer-designed materials relevant to instructional process, pedagogical issues of using computers in the classroom (6 hours).

PRESENTATION : The course will involve lectures, discussion, group work, demonstrations and hands-on experiences.

ASSESSMENT : In addition to classroom exercises, there will be two assignments and one written examination.

(a) Individual assignment: To review, summarize and critique a computer-related article. The paper will be typed using the word processing package.

(b) Group project: Evaluation and integration of CAL which will include an appropriate number of OHP masters prepared by using the computer.

(c) A written examination consisting of objective questions.

COURSE TITLE : Social and Moral Issues

DURATION : 30 hours

LECTURERS : Dr Robert Balhetchet (Coordinator)
Dr Arlene Bastion
Dr Tan Tai Wei

RATIONALE : Graduates of the Dip Ed course are not likely to teach Moral Education in schools unless they are assigned to Lower Secondary, at which level Moral Education is a subject on the curriculum. However, as teachers they will be expected to be informed of various issues and hold opinions on these.

This course initiates the student teachers into reflecting on issues that have moral implications and taking stands on them.

Before embarking on the discussion of issues, however, the student teachers are brought to think through various basic notions and principles that will enable them to discuss various issues and extract their moral implications.

OBJECTIVES :

1. To situate the student teachers in the local context of Moral Education in the school system.

2. To enable student teachers to reach a basic understanding of the notion of morality and its implications.

3. To equip the student teachers with a working knowledge of the factors that influence the evaluation of responsibility and accountability in human action.

4. To provoke reflection and evaluation in various areas of application of moral principles and provide channels of assessment of the student teachers' ability to apply knowledge gained in the course.

CONTENT :

1. <u>Introduction</u>

1.1 Historical background to Moral Education in Singapore schools.

1.2 Ministry of Education policy.

1.3 The Moral Education Syllabus (MOE).

1.4 The Aims of Moral Education (Principal's Handbook).

2. Understanding the Concept of Morality

2.1 The nature of morality.

2.2 Establishing a basic criterion for morality.

2.3 "Absolutes" in morality

- the problem of objectivity and subjectivity
- is there a need for objectivity?
- towards an understanding of and solution to the problem.

2.4 Natural, legal and religious morality - "Right" and "Wrong" in natural morality, law and religion.

3. Influences on the Moral Act

3.1 The anatomy and dynamics of the Moral Act.

3.2 Factors of influence on the moral act

- involving the Subject
- involving the Object
- involving Circumstance of Action
- involving Motive and Intention.

4. Professional Ethics

4.1 General Principles:

Truth, Honesty, Integrity. The end does not justify the "means". Legality v. morality. The rights of the "consumer". Copyright: law, morality and practice.

4.2 Business Ethics:

Applications in business practice: advertising: methods and morality.

4.3 Professional Ethics:
Client relationship, Confidentiality, Research ethics.

4.4 Work Ethics:

Positive attitudes.

5. Education Issues

5.1 Role of the "Mission" school in education.

5.2 The independent school. Is it elitist?

5.3 Is value education an imposition on students' thinking?

5.4 The educator's professional role and personal/social life.

5.5 Secularism in education.

5.6 Religious tensions in school.

5.7 The "generation gap" with special focus on education.

6. Socio-Moral Issues

6.1 Fads (e.g. MacDonald, Far East, Centrepoint Kids) are, by definition passing manifestations. Should they be taken seriously in terms of their effects on the social and moral values systems of our youth?

6.2 Singapore relies heavily on imported TV productions. Discuss their impact on cultural and moral development in Singapore and what measures, if any, should be taken to offset undesirable influences.

6.3 The role of government and voluntary agencies in the care of the handicapped and elderly. Problems and difficulties.

6.4 Socio-moral evils have always existed, for example, gambling, prostitution, drugs, etc. Does legalization effectively exercise control of these evils? Is it desirable? What side-effects can this have?

6.5 The formation of a moral conscience is particularly difficult in the context of Singapore, given its ethno-history and

the multi-racial and multi-religious composition of its people.

6.6 Discuss detention without trial in terms of fundamental human rights and freedom. Can such detention be justified? Are safeguards possible and effective?

6.7 Justice is considered to be a fundamental value that needs to be vigorously defended. Can this be carried as far as what is known as "civil disobedience" or even the overthrow of legitimate government?

6.8 Implications of being single and independent.

6.9 "Asian" values and core values.

7. Medico-moral Issues

7.1 Capital punishment, abortion and euthanasia in the context of the inviolable principle of preservation of life.

7.2 The morality of genetic engineering (including IVF - "in vitro" and "in vivo" fertilization). Are safeguards possible?

7.3 A.I.D. (artificial insemination by donor) and its implications for adultery and legitimacy.

7.4 AIDS (acquired immune deficiency syndrome). Casual occasion, preventive measures, diagnosis, prognosis and their moral implications.

ASSESSMENT : 1. An assignment on one of the topics from Content nos. 5-7 (various issues).

2. The main points of the issue with its implications for morality are to be outlined and discussed.

3. The various positions commonly taken in respect of the issue must be briefly pointed out.

4. The student teacher's own stand is to be expounded clearly with reasons and bases.

5. The length should be approximately 2000 words (minimum).

6. All assignments are to be handed in individually and personally to the lecturers and signed for by the student teachers on the lecturer's list.

REFERENCES :

1. Balhetchet, R.P. (Project Director). (1985). Being & Becoming - Moral Education Programme for Singapore Schools. Robert P Balhetchet (Project Director). Singapore : Curriculum Development Institute of Singapore. Ministry of Education and Longman.

2. Cochrane, D.B., Hamon, C.M. & Anastasios C.K. (1979). Domain of Moral Education, (The). New York : Paulist Press. (LC 268 DOM).

3. Developmental Theorists' Approach to Moral/Citizenship Education, (The). Moral Education/Citizenship Conference. Philadelphia, Pennsylvania. June 4-6, 1976. (LC 268 Mor).

4. Downs, J.F. (1975). Culture in Crisis. London : Macmillan. (HM 101 DOW).

5. Harland, J. S. (1960). Analysis of Morals, (An). London : Allen & Urwin. (BJ 37 HAR).

6. Hospers, J.R. (1962). Human Conduct - Problems of Ethics. London : Hart-Davies. (BJ 37 HOS).

7. Kattsoff, L.O. (1965). Making Moral Decisions - and existential analysis. The Hague : Martinus Nijhoff. (BJ 738 KAT).

8. Kirschenbaum, H. & Simon, S.B. (1973). Readings in Values Clarification. Minneappolis : Winston Press. (LC 268 KIR).

9. Peter, R.S. (1967). Ethics and Education. Atlanta : Scott, Foresman and Company. Atlanta. (LB 19 Pet).

10. Stenhouse, L. (1984). Culture and Education. Blackrock, County Dublin : Fourcourts. (LC 1011 STE).

## Managing Extra-Curricular Activities - MECA

The management of extra-curricular activities (ECAs) is an essential skill which beginning teachers need to acquire. Hence, all student teachers in the Diploma in Education Programme are required to undergo training in managing two ECAs. Except for those taking Design and Technology as CSO1 course who must enrol for managing the Plastic Craft Club and Managing the Wood Craft Club, student teachers will undergo training in managing

1. a club, society, or uniformed group in Term 1 and

2. an activity devoted to physical activities in Term 2.

### Non-Sports MECA

The non-Sports MECA courses are designed to provide student teachers with sufficient knowledge, skills and experience to enable them to organise various activities for a specific ECA in secondary schools or junior colleges.

Those who had previous training and experience in NPCC must enrol in Managing the NPCC in a Secondary School while those who intend to join Managing the School Choir will be auditioned before being admitted. Managing the Mathematics Society is meant for those taking CSO1 Mathematics. Managing the Social Studies Club is primarily intended for those taking Geography or History as one of their CSOs.

### Sports MECA

The Sports MECA courses are designed to allow student teachers to reach a sufficiently high standard in ability, knowledge and understanding of a physical activity so that they can be entrusted with the organisation and teaching of the activity as an ECA in secondary schools or junior colleges. It is, therefore, essential that the student teacher should have some initial ability and background in the activity he/she selects.

COURSE TITLE : Managing the Art Club - Ceramics

DURATION : 30 hours

LECTURER : Mr John Tan Peng Chieu

OBJECTIVE : To provide student teachers with the knowledge and skills necessary to enable them to run Ceramics as a form of ECA effectively.

CONTENT : Use of Care of Materials and Equipment

1. Organisation of the Ceramic Studio
2. Care and use of equipment in Ceramics
3. Care in the use of clay
4. Care in the use of glazes
5. Care in the use and handling of the kiln

Techniques

Hand building techniques:

6. Pinching
7. Coiling
8. Using slabs

Throwing on the wheel:

9. Decoration techniques
10. Glazing techniques
11. Firing techniques
12. Appreciation

ASSESSMENT : Practical work and critique.

COURSE TITLE : Managing the Art Club - Chinese Painting

DURATION : 30 hours

LECTURER : Dr Leong Weng Kee

OBJECTIVES : The main objectives are:

1. to equip student teachers with the basic techniques required for Chinese Painting.

2. to provide student teachers the opportunity to appreciate the art of Chinese Painting and to understand the characteristics of Chinese Painting.

3. to cultivate their interest for Chinese Painting as part of Oriental culture.

CONTENT :

1. The instruments and materials used for Chinese Painting:

   1.1 The Chinese brush.

   1.2 The Chinese ink.

   1.3 The rice-paper.

   1.4 The Chinese colour.

2. The basic techniques in the use of the brush.

3. Chinese Painting in black and white and the use of colour.

   3.1 The presentation of black and white.

   3.2 The presentation of colour.

4. Practice and approach.

   4.1 Painting of bamboo (mainly in black and white).

   4.2 Painting of flowers and birds (mainly in colour) (Wood Carving).

ASSESSMENT : By progress ratings.

COURSE TITLE : Managing the Art Club - Design

DURATION : 30 hours

LECTURER : Mr Sim Tong Khern

OBJECTIVES :

1. To develop knowledge and skill in managing art (design) in ECA.
2. To comprehend the needs and abilities of pupils in design problem and solution.
3. To understand the scope, significance and importance of design.

CONTENT :

1. ECA and Art Club concepts in school.
2. Planning, development and supervision of design activities.
3. Pupils' needs and abilities in handling design problem and solution.
4. The design process; form and function.
5. Materials, tools, facilities, storage and display.
6. Basic design elements.
7. Design activities and application.
8. Design appreciation.

ASSESSMENT : By coursework and attendance.

COURSE TITLE : Managing the Art Club - Drawing and Painting

DURATION : 30 hours

LECTURER : Mr Richard Hickman

OBJECTIVES :

1. To provide knowledge and expertise in managing the Drawing and Painting component of the Art Club.
2. To provide some understanding of the theory and practice of drawing and painting.
3. To help in drawing up and implementing a Drawing and Painting programme for the school Art Club.

CONTENT :

1. Nature and purpose of Drawing/Painting.
2. Tools and materials for Drawing and Painting.
3. Terms used in Drawing/Painting.
4. Some suggested drawing/painting activities.
5. Organising outdoor work.
6. Organising museum visit.
7. Planning a programme for the school Art Club.
8. Organising an exhibition.

ASSESSMENT : By coursework and attendance.

COURSE TITLE : Managing the School Band

DURATION : 30 hours

LECTURER : Mr Ho Hwee Long

OBJECTIVES : To equip student teachers with:

1. the knowledge of the functions and objectives of the school band programme.
2. the ability in organising the band programme.
3. the ability to equip the band.
4. the knowledge of instruments of the contemporary symphonic band.
5. the motivational techniques and ways of sustaining interest.

CONTENT :

1. Function and objectives of school band programme in the educational system.
2. Organising the school band programme
   - 2.1 Recruitment - selection of pupils.
   - 2.2 The schedule of classes.
   - 2.3 Publicity.
3. Administering the physical plant and equipment
   - 3.1 Accountability.
   - 3.2 Maintaining instruments and equipment.
   - 3.3 Implementing library growth and care of material.
4. Budget and finance of the band.
5. Choice of musical instruments.
6. Musical Activities Programme
   - 6.1 Public performance.
   - 6.2 Workshop.

6.3 Music Camp.

6.4 Contests.

6.5 Youth festivals.

6.6 Trips.

Assessment : Written Project

COURSE TITLE : Managing the School Choir

DURATION : 30 hours

LECTURER : Mr Chia Wei Khuan

OBJECTIVES : Upon completion of the course, student teachers are expected to have:

1. acquired a basic understanding of the organisation and management of a school choir.

2. acquired some practical experience in the singing and conducting of a basic school choral repertoire.

CONTENT :

1. Recruiting and auditioning
2. Division of voices
3. Selecting songs
4. Planning a rehearsal
5. Rehearsal technique
6. Repertoire workshops
7. Conducting workshops

ASSESSMENT :

(a) Practical assessment on choral conducting.

(b) Practical assessment on organisation of an end of course concert.

COURSE TITLE : Managing the Recorder Group

DURATION : 30 hours

LECTURER : Mr Robert Henderson

OBJECTIVES :

1. The student teacher will be able to blow the descant recorder in the range from Middle C to High A.
2. The student teacher will be able to read the treble staff.
3. The student teacher will know the basic knowledge of the rudiments of music.
4. The student teacher will know how to organise a recorder group as an ECA in school.

CONTENT :

1. Rudiments of Music
   - 1.1 The staff. G and F clef. Ledger lines.
   - 1.2 Name of notes, time value of notes, dotted notes and rests.
   - 1.3 Simple and compound time-signatures ($\frac{6}{8}$ only).
   - 1.4 Construction of the major scales. Major keys of C, G, D and F.
   - 1.5 Construction of the minor keys. Minor keys of D, G, C.
2. Recorder
   - 2.1 Care of the instrument.
   - 2.2 Technique of playing the instrument.
   - 2.3 Range of Middle C to high A, including $F^{\sharp}$, $F^{\sharp\sharp}$, $C^{\sharp}$, $C^{\sharp\sharp}$ & $B^{\flat}$.
   - 2.4 Acquire some unison and two and three part recorder pieces.
   - 2.5 Organisation of recorder group as an ECA in school.

N.B. Student teachers need to possess a Descant Recorder.

ASSESSMENT : By progress ratings.

REFERENCES :

1. Freda Dinn. The Recorder in the School.

2. Freda Dinn. My Recorder Tune Book.

3. Freda Dinn. More Tunes for My Recorder.

4. EPB. Music Making Bk 3, 4, 5 & 6.

COURSE TITLE : Managing the LDDS - Drama

DURATION : 30 hours

LECTURER : Mr Clive Scharenguivel (Coordinator)

OBJECTIVES :

1. To provide student teachers with the skills, experience and knowledge to enable them to take on LDDS drama activities and responsibilities in school.

2. To give student teachers opportunities to participate in various mime, movement, role-playing improvisation and drama activities: so that, they can use or adapt these in the school programme or LDDS syllabus.

3. To complement the academic programme in IE with sufficiently varied and adequately organized ECA programme in order to develop to the full student teachers' potential.

CONTENT :

1. Educational or Creative Drama

Drama as an educational medium, aims, principles and value of educational/ creative drama.

A theoretical basis for using educational drama, general approach and practical activities.

Suggested material for use in drama lessons in schools.

2. Planning a Drama Lesson

Integrating drama in the school curriculum. Using drama to teach English - Drama and Language Development. Practical Organization. The role of the teacher. Motivating the pupils. Control, class discipline; using drama as an approach to scripted plays.

3. Practical Activities

Each session will comprise practical activities, discussion & evaluation so that student teachers may develop their own awareness, sensitivity and dramatic qualities

through movement, mime, roleplay improvisation etc.

4. Directing a play

Discussion followed by practical sessions on the following activities.

. Choosing a play
. Rehearsing and directing the play
. Making a prompt copy
. Casting and Acting
. Decor
. Costume
. Stage lighting
. Make-up
. Music & Sound Effects
. Props
. Role of the Business Manager
. Publicity
. The School Drama Festival

ASSESSMENT : 1. Progress ratings.

2. Simulated teaching using creative/educational drama.

3. Participation in a production (selected from excerpts of plays), acting, designing and making sets, costumes etc. or directing excerpts of plays.

COURSE TITLE : Managing the LDDS - Debating

DURATION : 30 hours

LECTURER : Mrs Pauline Steele

RATIONALE : The course is designed to foster the knowledge and skills necessary for organising and managing a Literary and Debating society in schools. This will include ways to encourage the creation of a school climate where creative writing can grow and flourish, and where the skills of debate are appreciated and practised.

OBJECTIVES : On successful completion of the course the student teachers should be able to:

1. help pupils produce creative writing in various genre including poetry, short stories, original drama scripts and magazine articles, reports and reviews.

2. understand the technical and business side of editing and publishing.

3. coach, run and adjudicate public speaking and debating contests.

4. organise activities on campus such as visits of guest speakers, as well as the publicity and other arrangements involved, so that they can gain experience in all aspects of ECA management in the literary and public speaking field.

CONTENT : The course will consist of a series of seminars and workshops on the following topics:

1. Introduction and overview of the programme.

2. Creative writing workshops - building up a folder of work.

3. Editing and publishing - including a look at various desk-top publishing packages. (If work of a sufficient calibre is produced, consideration will be given to forming an editorial and publication group)

4. Reading and sharing of work produced.

5. Inviting writers to talk about their work.

6. Introduction to public speaking and debating. How to teach the basics.

7. Adjudication.

8. Running a debating or public speaking contest.

9. Chairmanship.

10. Programme evaluation.

ASSESSMENT : By progress ratings.

REFERENCES :

1. Bacer & Seabury. (1965). Teaching Speech in Today's Secondary Schools. Holt Rinehart.

2. Brownjohn, S. (1980). Does it Have to Rhyme? Hodder & Stoughton.

3. Burge, N. (1985). Convervations with Writers Who Teach. Ohio State University : Swallow Press.

4. Elbow, P. (1981). Writing with Power: Techniques for Mastering the Writing Process. OUP.

5. Gunther, N. (1980). Debating and Public Speaking. N.Z. : A.H. & A.W. Reed.

6. Protherough, R. (1983). Encouraging Writing. Methuen.

COURSE TITLE : Managing the Hobbycraft Club

LECTURERS : Mr Eric Low
Mr A.K. Kwek

OBJECTIVES : On successful completion of the course the student teachers should be able to:

1. help pupils to develop basic skills in working with wood, metal and plastics.

2. encourage pupils in the creative use of materials.

3. plan and manage meaningful craft activities within the capabilities of the pupils so that they can realise their design ideas.

4. plan and organise resources and facilities.

CONTENT :

1. Introduction and overview of the programme

2. Programme planning for a hobbycraft course in school

3. Facilities and resources

4. Creative activities

The programme is practice oriented and creative activities form the major portion of the course. The activities may include the following:

4.1 Metal : Making of a letter opener, simple sculpturing in metal, and converting discarded metallic items into useful artefacts.

4.2 Wood : Picture mounting and making artefacts involving simple processes.

4.3 Plastics: Making of simple acrylic artefacts, perspex/glass staining, casting and encapsulating.

ASSESSMENT : Progress ratings.

COURSE TITLE : Managing the Home Economics Club

DURATION : 30 hours

LECTURERS : Mrs Joyce Chew
Miss Tng Sai Tin

OBJECTIVES :

1. To help student teachers understand the need for good organisation and planning in order to run effective and meaningful programmes.

2. To provide student teachers with the opportunity to develop their interest and learn the skills applicable to organising and conducting ECA in schools.

ACTIVITIES :

1. Craftwork and Floral Arts - student teachers will be taught macrame, decoupage, soft toys, flower making and other crafts using recycled or scrap material.

2. Dressmaking - student teachers will be taught to sew simple garments.

3. Cake making - student teachers will learn to make some local and western cakes, pastries and biscuits.

ASSESSMENT : By progress ratings.

COURSE TITLE : Managing the Social Studies Club

DURATION : 30 hours

LECTURERS : Mr Wilson Jacob
Mr Liaw Beng Teck

RATIONALE : Formal classroom teaching of History and Geography needs to be reinforced by organised extra-curricular activities so that learning and leisure can converse and integrate inextricably. The activities of the club are likely to give a new meaning and a wider perception of the disciplines. It is for the above reasons that this course is offered.

DESCRIPTION : This course is intended primarily for the History and Geography student teachers. It aims at promoting greater teacher and pupil involvement in the Social Studies Club through a series of planned activities. The range of activities relating to the social, educational and administrative facets should familiarise student teachers with the basics of how to go about organising the club. Opportunities are provided for student teachers to actually manage the club and to plan and carry out club activities.

OBJECTIVES : Student teachers will learn:

1. how to promote greater pupil participation in the Social Studies Club activities.

2. how to plan, select and organise meaningful activities relevant to Social Studies Club.

3. how to identify local and foreign sites for excursion and field teaching at secondary level.

4. how to develop administrative competency for effective management of Social Studies Club.

CONTENT : 1. <u>Introduction</u>

1.1 Social Studies in the context of the wider school environment.

1.2 Integrating Social Studies across the curriculum.

2. Systematic approaches to organising the Social Studies Club

2.1 The strategies for programme development.

2.2 A long-range planning for club activities.

3. Managing the Social Studies Club

3.1 Organising and implementing the programme.

3.2 The role of a teacher-advisor.

3.3 Pupils as key participants and decision-makers.

4. Alternative approaches to improve learning through extra-curricular activities

4.1 The importance and judicious use of limited school resources and facilities.

4.2 Effective use of community resources.

5. Conducting local field trips

5.1 The preparation.

5.2 Field trips to interesting historical and geographical sites.

5.3 The follow-up activities.

6. Knowing the areas, functions and activities of relevant organisations/institutions

6.1 The National Museum.

6.2 Monuments Preservation Board.

6.3 Malayan Nature Society.

7. Organising educational tours to foreign countries

7.1 The procedures.

7.2 The practical problems.

7.3 The programme.

8. Programme evaluation

8.1 A reflection on project planning and scheduling techniques.

8.2 Factors that promote or inhibit pupil involvement in club activities.

8.3 Programme review.

ASSESSMENT : Under the supervision of the lecturer, each student teacher is required to formulate, carry out and report on a project relevant to the Social Studies Club.

COURSE TITLE : Managing the Plastic Craft Club

DURATION : 30 hours

LECTURER : Mr Foo Chee Min

RATIONALE : The course is designed specifically for engineering student teachers to acquire basic knowledge and skills in working with plastics. It is also aimed at providing them with the necessary know how to organise and manage ECA activities related to working with plastics.

OBJECTIVES : On successful completion of the course the student teachers should be able to:

1. help pupils to acquire basic skills in working with plastics.
2. encourage pupils in the creative use of plastics materials.
3. use the various fabricating and moulding tools, apparatus and machinery safely and confidently.
4. plan and manage meaningful craft activities within the capabilities of the pupils so that they can realise their design ideas.
5. plan and organise resources and facilities.

CONTENT :

1. Introduction and overview of the programme.
2. Characteristics and working properties of common plastics.
3. Basic processes - marking out, cutting, machining, forming, joining, casting, finishing and fastening.
4. Identification of plastics.
5. Moulding Processes
   - 5.1 Injection moulding
   - 5.2 Blow moulding

5.3 Extrusion

5.4 Compression

5.5 Rotational moulding

6. Forming and Laminating

6.1 Vacuum forming

6.2 Pressure forming

6.3 Free forming

6.4 Fiberglass laminating

6.5 Thermoplastics laminating

7. Casting and Foaming

7.1 Casting resins

7.2 Thermofusion

7.3 Foaming plastics

7.4 Silicone casting

8. Coating and Decorating

8.1 Hot stamping

8.2 Silk screen decorating

8.3 Engraving

8.4 Painting

9. Welding Plastics

9.1 Hot gas welding

9.2 Ultrasonic welding

10. Systematic approaches to organising the Plastic Craft Club

11. Programme planning for a plastics craft course in schools

11.1 Creative activities

11.2 Facilities and resources

12. Programme evaluation

ASSESSMENT : By progress ratings.

REFERENCES :

1. Greenwood, D.P. (1980). Plastics: Craftwork and Technology. London : John Murray.

2. Miller, W.R. & Steele, G.L. (1978). Basic Industrial Arts: Plastics. Illinois : Mcknight.

3. Peter, J. C. (1980). Plastics for Schools. London : Mills and Boons Limited.

4. Steele, G. L. (1977). Exploring the World of Plastics. Illinois : Mcknight.

COURSE TITLE : Managing the Wood Craft Club

DURATION : 30 hours

LECTURER : Mr Chan Weng Cheong

RATIONALE : The course is designed specifically for engineering student teachers to acquire basic knowledge and skills in working with wood. It is also aimed at providing them with the necessary know how to organise and manage ECA activities related to working with wood.

OBJECTIVES : On successful completion of the course the student teachers should be able to:

1. help pupils to acquire basic skills in working with wood.
2. use the various basic woodworking hand tools and machinery safely and confidently.
3. encourage pupils in the creative use of wood for making artefacts.
4. plan and manage meaningful wood craft activities within the capabilities of the pupils so that they can realise their design ideas.
5. plan and organise resources and facilities.

CONTENT :

1. Introduction and overview of the programme
2. Use of basic hand tools and processes
   - 2.1 Marking out
   - 2.2 Methods of holding work
   - 2.3 Cutting
   - 2.4 Shaping
   - 2.5 Joining and assembly
3. Characteristics and uses of common timbers and manufactured boards

4. Framing Joints

   4.1 Halving joint

   4.2 Bridle joint

   4.3 Mortise and tenon joint

   4.4 Dowel joint

5. Simple Finishes

   5.1 Preparation of surfaces

   5.2 Application of lacquer

6. Woodworking Machines

   6.1 Operation and use of common woodworking machines

   6.2 Portable power tools

7. Uses of Woodworking Adhesives

   7.1 Animal glue

   7.2 PVA glue

   7.3 Contact adhesives

8. Woodworking Hardwares

   Hinges, knockdown fitting locks, handles, etc.

9. Systematic approaches to organising the Wood Craft Club.

10. Programme planning for a wood craft course in schools

    10.1 Creative activities

    10.2 Facilities and Resources

11. Programme Evaluation

ASSESSMENT : By progress ratings.

REFERENCES :

2. Miller, W.R. & Zook, W.H. (1978). Basic Industrial Arts: Woodworking. Illinois: Mcknight.

4. Yarwood, A. (1984). Design and Woodwork. London : Hodder and Stoughton.

1. Hontoir, A. (1986). The Practical Woodwork Book. London : John Murray.

3. Willacy, D.M. (1987). Craft and Design in Wood. London : Century Hutchinson.

COURSE TITLE : Managing the Mathematics Society

DURATION : 30 hours

LECTURER : Dr Wong Khoon Yoong

OBJECTIVES : This course will provide student teachers with the knowledge and skills in managing Mathematics Society in secondary schools. The student teachers will learn to plan, select and organise meaningful activities for the Mathematics Society.

CONTENT : The course will expose student teachers to the following activities/projects :

1. Investigative work, projects and games in mathematics.
2. Quizzes and competitions (local and international) to develop pupils' mathematical thinking.
3. History of mathematics to promote pupils' interest in mathematics.
4. Computer-based activities for mathematics.
5. Use of various facilities and resources.
6. Field trips.

The programme involves a deeper study of mathematics to inculate in student teachers a view of mathematics that is beyond mere application of rules and algorithms. The student teachers will apply this new understanding of mathematics to promote pupil interest in mathematics and their mathematical thinking.

ASSESSMENT : Assessment will be based on progress rating of weekly performance. In addition, each student teacher, working singly or in a group, will be required to plan a project or to develop materials that can be used for the Mathematics Society.

REFERENCES : 1. Agostini, F. (1980). Mathematical and Logical games. London : MacDonald. (QA95 Ago).

2. Bolt, B. (1985). More Mathematical Activities : A Resource Book for Teachers. Cambridge, CUP. (QA95 Bol).

3. Cundy, H.M. & Rollett, A.P. (1981). Mathematical Models. 3rd Ed. Norfolk: Tarquin Pub. (QA11 Cun).

4. Gardiner, A. (1987). Mathematical puzzling. Oxford: OUP. (QA95 Gar).

5. Hess, A.L. (1982). Mathematics projects handbook. Reston, VA : NCTM. (QA11 Hes).

6. Mottershead, L.J. (1985). Investigations in Mathematics. Oxford: Basil Blackwell. (QA95 Mot).

COURSE TITLE : Managing the School Science Society

DURATION : 30 hours

LECTURERS : Mrs Ruth Chellappah
Dr Chia Teck Chee
Mrs Lam Yoke Yeen

OBJECTIVES : The course will provide student teachers with the skills and the knowledge of managing the school science society. The student teachers will be exposed to administrative procedures for running the society and will be having hands-on experience in a wide variety of activities and experiments.

CONTENT : The course will expose student teachers to a wide variety of activities/experiments which may include the following:

1. Preparing transparent specimens
2. Making leaf-vein specimens
3. Constructing a solar cooker
4. Making fireproof threads, soap, rayon, cosmetics and polishes
5. Astronomy - The wonders of space
6. Field trips

Student teachers will be encouraged to do library research and to try out their own experiments. Thereafter their work will be exhibited.

ASSESSMENT : Assessment will be based on on-going progress rating of weekly performances and their research and conduct in experimentation. This will culminate in an exhibition of materials learnt/developed during the course.

COURSE TITLE : Managing the AVA Club

DURATION : 30 hours

LECTURER : Mrs Tan Swee Chiew

RATIONALE :

1. To simulate and promote the use of AV media materials effectively across the school curriculum.

2. To equip student teachers with skills, knowledge and experience in organising activities relevant to the AVA Club.

3. To provide student teachers with opportunities to develop interest in creating instructional materials for schools' resource centres.

CONTENT :

1. Introduction

   1.1 AVA Club in the context of the school environment

   1.2 Integrating AV media and resources across the school curriculum

2. Systematic approaches to organising the AVA Club

   2.1 Recruitment and selection of pupils

   2.2 Publicity

   2.3 Time and scheduling

   2.4 Planning of Club activities

3. Managing the AVA Club

   3.1 Roles of the teacher-in-charge and the pupil members

   3.2 Implementing the programme activities which will include a number of hands-on experience, such as scheduling and organising AV Club activities on handling

and simple maintenance of AV equipment, production of instructional materials and cataloguing AV equipment and materials.

4. Programme review

ASSESSMENT : By progress ratings.

COURSE TITLE : Managing the Computer Club

DURATION : 30 hours

LECTURER : Dr Philip Wong

OBJECTIVES : This course intends to expose student teachers to the management and administration of Computer Clubs in secondary schools. The student teachers will also learn skills and knowledge in selecting and organizing relevant activities for members of the club.

CONTENT :

1. Overview of the course

2. Organization and administration of Computer Club

   2.1 Administrative procedures to run a Computer Club (e.g. budget, acquisition, inventory, and cataloguing)

   2.2 Design and set-up of computer laboratory (e.g. location of electrical power points, furniture, etc.)

   2.3 Administrative rules governing the operation of the club (e.g. attendance, copyright, booking of computer time, etc.)

3. School Visits

   Visits to two secondary schools' Computer Club to observe their activities, set-up and mode of operation.

4. Skills and knowledge in the use of various software programs

   4.1 Hands-on experience with software packages

   4.2 Project work relevant to the Computer Club

ASSESSMENT : This is based on on-going progress of weekly performance. Each student teacher is also required to develop a project relevant to the computer club.

COURSE TITLE : Managing the School Library Club

DURATION : 30 hours

LECTURER : Dr Yeap Lay Leng

OBJECTIVES : Most secondary schools have library clubs as an extra curricular activity. Teachers, trained or untrained in school librarianship, are appointed library club advisors. As school librarianship is not a school subject, there is a possibility that student teachers may not be familiar with the content of school librarianship related to the skills of managing school library clubs. Instruction in these skills prepares student teachers for their role as school library club advisors.

OBJECTIVES :

1. To prepare student teachers to function effectively as advisors to school library clubs.
2. To provide them with knowledge and skills in planning and organising activities for school library clubs.

CONTENT :

1. Organising and conducting orientation activities for the school library club
   - 1.1 Tours to libraries
   - 1.2 Talks on school library citizenship, structure, and housekeeping procedures
   - 1.3 Recruitment of new library members
2. Library skills instruction
   - 2.1 Use of card catalog
   - 2.2 Classification and cataloging
   - 2.3 Location of library resources
   - 2.4 Parts of a book
   - 2.5 Use of references

3. Promotion and exhibitions

   3.1 Exchanging books with book clubs

   3.2 Organising quizzes and competitions

   3.3 Organising book displays

   3.4 Organising book week/reading month

   3.5 Inviting guest speakers e.g. authors, publishers, book illustrators

   3.6 Organising booktalks/film shows

   3.7 Preparing visual displays, posters and banners

4. Special activities

   4.1 Publication of newsletters

   4.2 Writing reviews

   4.3 Training new student librarians

   4.4 Visits to public libraries, warehouse sales, bookshops, book fairs

   4.5 Organising annual general meetings

   4.6 Taking inventories and weeding

ASSESSMENT : By progress ratings in the following areas:

1. Planning of content, materials, and activities for the following topics : library skills instruction, training student librarians.

2. Class presentation of selected activities related to the following topics: writing reviews, organisation of talks, public speakers, meetings, educational trips, organising book displays and competitions.

3. Visual display for promotion, publicity, bookweek, reading month.

COURSE TITLE : Managing the Community Service

DURATION : 30 hours

LECTURER : Dr Elena Lui Hah Wah

OBJECTIVES : The general objective of this course is to help student teachers acquire skills and knowledge to assume responsibilities in organising community service activities in their schools upon graduation. When they complete this course, they should be able to:

1. create social awareness among their pupils by sensitising them to the plight and needs of the less fortunate in our society.
2. organise community service activities for pupils or advise them on how to organise these activities.
3. liaise with social service agencies in conducting community service.

CONTENT :

1. Introduction
   - 1.1 Course objective
   - 1.2 Discussion on course content and activities
   - 1.3 Group interaction
2. Reaching out to People and Volunteerism
   - 2.1 Rationale
   - 2.2 Scope
   - 2.3 Methods (levels of participation)
   - 2.4 Voluntary service agencies
3. Community Services in Singapore
   - 3.1 Social Services for the Aged
   - 3.2 Social Services for Youth
   - 3.3 Social Services for Children

3.4 Social Services for the Disabled

3.5 Community Chest of Singapore

4. How to Organise Visits to Welfare Homes and Social Service Agencies

4.1 Goal setting

4.2 Programme planning

4.3 Liaison with agencies

4.4 Budgetting

4.5 Programme implementation

4.6 Programme evaluation

5. How to Organise School-based Charity Events

5.1 Planning

5.2 Networking

5.3 Budgeting

5.4 Monitoring

5.5 Reporting

ASSESSMENT : The performance of student teachers in this course will be assessed by:

(a) lecturer's observation

(b) attendance in the course

(c) participation in the group discussion and exercises

COURSE TITLE : Managing the Girl Guide Companies and Units

DURATION : 30 hours

LECTURERS : Mrs Muriel Lim-Quek (or Training Officers from Girl Guide Headquarters)

OBJECTIVES :

1. To know and practise the Guide Promise and the Guide Law
2. To acquire skills in organizing and managing Girl Guide Companies in Schools
3. To develop leadership and character training

CONTENT :

1. Overview of Guiding : (meaning and objectives)

   1.1 Origin and development of the Guide Movement; structure and growth of the Girl Guide.

   1.2 Knowledge and Understanding of the three-fold Promise, the Guide Law.

   1.3 Know the meaning of the Guide Trefoil, World Badge and the Guide World Flag.

   1.4 Know the correct way to fly the flag and flag etiquette; drill and unit ceremonies; horse-shoe formation; colour party.

   1.5 Understand the meaning of the Good Turn; the Guide Salute; the Guide sign; Handshake; Guide Motto.

   1.6 Know the whistle and hand signals.

   1.7 Knowledge of first aid and road safety.

   1.8 Know the basic knots and tracking signs.

2. Managing the Guide Unit - Theory & Practice (Unit Management)

   2.1 Plan activity programme for the Guides; understand training and test work for Guides; patrol systems; experience in keeping logbooks and accounts etc.

| | | | |
|---|---|---|---|
| ASSESSMENT | : | Tenderfoot Test (for Enrolment in the Guide Movement) | 30% |
| | | Assignment | 20% |
| | | Progress ratings | 50% |

COURSE TITLE : Managing the National Police Cadet Corps (NPCC) in a Secondary School

DURATION : 30 hours

LECTURER : DSP(NPCC) Lee Soon Huat

RATIONALE : 130 Secondary Schools have NPCC as a major extra curricular activity. Teachers are trained by the NPCC HQ to run the NPCC Units in schools. Instruction in the skills of managing the NPCC Unit in the secondary school prepares student teachers for their role as NPCC teacher-officers.

OBJECTIVES :

1. To prepare student teachers to function effectively as NPCC Officers in the school units.
2. To provide them with the knowledge and skills in planning, organising and conducting NPCC activities.

CONTENT :

1. Organising and conducting orientation/ familiarization activities for the school NPCC Unit through talks on the following subject areas:
   - 1.1 Creative thinking and link analysis technique
   - 1.2 Law
   - 1.3 History & organisation of the NPCC
   - 1.4 History & organisation of the Police Force
   - 1.5 Unit administration
   - 1.6 Training resource & courseware kits
   - 1.7 Weapon training theory
2. NPCC skills instruction

2.1 Footdrill

2.2 Armsdrill

2.3 Baton drill

2.4 Cane drill

2.5 Sword drill

2.6 Defence tactics

2.7 Weapon training

2.7.1 Handling of .22 & .38 revolver & air rifle

2.7.2 Dry practices

3. Special activities

3.1 Tour of a typical Adventure Training Camp

3.2 Visit to Police Land Division/NPP

3.3 Visit to CID, Traffic Dept, Radio Division and Marine Division

3.4 Tour of Traffic Park

ASSESSMENT : 1. Performance in skills instruction.

2. Attitude.

3. Preparation of teaching aids for instruction.

COURSE TITLE : Sports MECA - Badminton

DURATION : 30 hours

LECTURERS : Staff of CPE

OBJECTIVES :

1. To improve the student teachers' personal performance.
2. To train the student teachers to be competent to teach the basic skills of Badminton.
3. To know the rules of badminton and be able to officiate badminton games.
4. To be able to organise badminton competitions.

CONTENT :

1. Learning Badminton - The Skills of the Game

   The Strokes - (a) Overhead
   (b) Underarm
   (c) Drive Strokes

   Serve - (a) Doubles
   (b) Singles

   Receiving service
   Net play
   Footwork, balance and stroke play
   Simple practices for the strokes

2. Teaching Badminton in the School

   Planning a programme
   Equipment and facilities
   A programme of lessons
   Teaching the strokes
   Coaching tactics
   The Laws of Badminton - Officiating

ASSESSMENT :

1. Course work and practical performance : 60%
2. Written exam : 40%

REFERENCES :

1. Davis, P. (1982). Badminton - The Complete Practical Guide.
2. Downey, J.C. (1969). Better Badminton for All.
3. Downey, J.C. (1978). Badminton for Schools.

COURSE TITLE : Sports MECA - Dance

DURATION : 30 hours

LECTURER : Mrs Goh-Leong Lai Keun (CPE)

COURSE OUTLINE :

1. FOLK DANCE UNIT (8 hours)

   Objective : To learn and teach international folk dances.

   Content : The major emphasis of this unit is on international folk dances.

   Assessment : Teaching method and evaluation of student teacher's performance.

2. CREATIVE DANCE UNIT (12 hours)

   Objectives : To expand the movement range and repertory of students.

   To develop student teachers' ability to work freely and spontaneously according to their imagination.

   Content : The major emphasis of this unit is on the various improvisational techniques drawn from dance (e.g. effort-shape), music and theatre.

   Assessment : Group choreography.
   A folder.

3. DANCE TECHNIQUES (10 hours)

   Objective : To provide student teachers with some basic vocabulary for their technical development.

   Content : Simple centre and floor exercises drawn from modern, jazz and ballet techniques.

   Assessment : Evaluation of student teachers' performance.

REFERENCES :

1. Haskell, A.L. (1960). The Wonderful Word of Dance. New York : Garden City.

2. Preston-Dunlop, V. (1980). Handbook for Dance in Education (2nd Edition), MacDonald and Evans.

COURSE TITLE : Sports MECA - Netball

DURATION : 30 hours

LECTURER : Miss Koh Sock Miang (CPE)

OBJECTIVES : The course is designed to enable student teachers to teach the game of Netball at secondary school level and as an ECA activity. Although the basic skills will be reviewed the course will concentrate on "refining" skill technique, using conditioned games for maximum participation, umpiring and tournament organisation.

SYLLABUS :

WEEK 1 Revision of Basic Skills

(a) Passing and catching : chest, lob, shoulder and bounce. (2v2 or 3v3 game)

(b) Footwork : single foot landing and pivot. (3v3 game)

(c) Shooting : one handed and two handed. (3v2 or 3v3 game)

WEEK 2 Refining Basic Skills

(a) Passing to a moving player : passing ahead, using most appropriate pass. indicating for the ball, using the space.

(b) Footwork : taking off and landing on either foot, use of double foot landing.

(c) Marking and dodging : staying with an opponent, getting free to receive a pass from a stationary position, feint and doge.

WEEK 3 Revision of Marking and Dodging

(a) Double dodge, lunge, indicating for a lob.

(b) Defending and opponent: intercepting a pass, intercepting a throw, intercepting a shot.

(c) Man to man defence and blocking.

WEEK 4 Shooting Practices and Rules of the Game

(a) Shooting drills to improve accuracy, pressurized training for shooters, shooting on the run.

(b) Rules of the game : court positioning and areas of play, infringements, toss-up, throw-in, off-side, obstruction, contact, off-side, over one-third, the centre pass.

(c) Umpiring Technique.

WEEK 5 Revision of Umpiring Technique and Set Plays

(a) Recognising infringements and the umpires duty.

(b) Set plays form the Centre Pass.

(c) Set plays from a sideline or end line ball.

WEEK 6 Basic Link

(a) Pass the ball up the court.

(b) Timing and dodging to receive a pass.

(c) Blocking a player(s) out of the circle.

WEEK 7 Organisation of Tournaments

(a) Round Robin

(b) Knockout

(c) First Aid Procedures

WEEK 8 Revision of Rules Umpiring Techniques and Theoretical Examination

WEEK 9 Practical/Umpiring Assessment

ASSESSMENT : 1. Practical

| | |
|---|---|
| Individual Skills - Isolated/Game Situation (Continual Assessment) | 30% |
| Umpiring Assessment | 30% |

2. Theoretical

| | |
|---|---|
| Written Test | 30% |
| Netball File | 10% |

REFERENCES :

1. Singapore Womens' Netball Association, Rules of Netball.

2. Miles Anne. (1981). Success in Netball. (GV 889.6 MIL).

3. Brown Joyce. (1981). Netball the Australian Way. (GV 889.6 BRO).

4. Wheeler Joyce. (1979). Games for Netball Training. (GV 889.6 WHE).

COURSE TITLE : Sports MECA - Soccer

DURATION : 30 hours

LECTURER : Mr Morgan Thomas (CPE)

OBJECTIVES : As a result of this course student teachers should be able to organise and teach soccer at secondary school level.

SYLLABUS :

1. Basic analysis of game (Territorial Invasion).
2. Retaining possession (Use of Time & Space).
3. Support (Width & Depth).
4. Ball control and distribution.
   (a) Close/low
   (b) Long/low/high
   (c) Heading
5. Dribbling/beating a man.
6. Dead ball situations.
7. Basic tactics.
8. Principles of contemporary games teaching (Use of small sided/adapted games).
9. Organisation and management of groups/ teams.

ASSESSMENT :

| | | |
|---|---|---|
| Practical | : | 50% |
| Coursework file | : | 50% |

REFERENCES :

1. Hughes, C. (1981). Soccer Tactics & Skills. B.B.C. and Queen Press.
2. Wade, A. (1978). F.A. Guide to Teaching Football. London : Heinemass.
3. Worthington, E. (1980). Teaching Soccer Skill. Lepus Books.

COURSE TITLE : Sports MECA - Swimming

DURATION : 30 hours

LECTURERS : Mr Tan Hwee Hock (CPE)

OBJECTIVES : This course will enable student teachers to teach the basic swimming strokes - breast stroke, back stroke and front crawl to school children. It will also enhance their personal swimming skills.

Student teachers will also be instructed on water safety skills of the life-saving manual and sample various lesson formats for managing swimming as an ECA.

SYLLABUS :

1. Water confidence practices.
2. Techniques and progressive teaching steps of:
   (a) Front Crawl
   (b) Breast Stroke
   (c) Back Stroke
   (d) Treading Water
3. Methods of water safety rescues and resuscitation.
4. Pool hygiene & safety precautions.
5. Plunge from side of pool.
6. Lesson plans.

ASSESSMENT :

1. Assignment : 40%
2. Practical performance : 60%

REFERENCES :

1. Amateur Swimming Association. (1981). The Teaching of Swimming.
2. Counsilman, J.E. (1968). The Science of Swimming. Prentice Hall.
3. Palmer, M.L. (1979). The Science of Teaching Swimming. Pelham Books.
4. Royal Life Saving Society Handbooks. (1978). Instruction Manual.

COURSE TITLE : Sports MECA - Table-Tennis

DURATION : 30 hours

LECTURER : Mr Ong Lye Huat (CPE)

OBJECTIVES : The course aims at providing student teachers a basic level of competency in the organising and coaching of table-tennis in schools and thereby enabling them to make a contribution to the school ECA.

SYLLABUS :

1. Basic Skills
   - (a) Forehand push
   - (b) Forehand drive
   - (c) The block
   - (d) Service: Forehand fast serve
     Backhand fast serve
   - (e) Return of serve
   - (f) Forehand smash
   - (g) Lob
2. Spin production
3. Doubles play
4. Laws of the game
5. Organisation of a tournament

ASSESSMENT : Practical performance : 70%
Written test : 30%

REFERENCES :

1. Carrington, J. (1979). Progressive Table-Tennis. London : Bell & Hyman.
2. English Table Tennis Association. National Coaching Scheme, Coaching Manual.
3. Simpson, P. (1981). How to play table-tennis. Hamlyn Publishing Group.

COURSE TITLE : Sports MECA - Tennis

DURATION : 30 hours

LECTURER : Mr John Koh (CPE)

OBJECTIVES : The course is designed to teach the student teachers the basic skills of tennis and to improve their teaching and coaching ability. Emphasis will also be placed on the promotion and organisation of tennis as an ECA at the secondary school and junior college levels.

SYLLABUS :

1. Basic Strokes

   - Forehand
   - Backhand
   - Serve
   - Volley

   (Teaching Progressions)

2. Supplementary Strokes

   - Return of service
   - Lob
   - Overhead smash
   - Half-volley

   (Teaching Progressions)

   - Approach-shot & volley
   - Serve and volley
   - Top-spin & backspin

3. Singles and Doubles Games for beginners.

4. Laws of the Game and Umpiring.

5. Organisation of Competition.

ASSESSMENT :

| | | |
|---|---|---|
| Practical assessment | : | 50% |
| Written examination | : | 30% |
| Course-work file | : | 20% |

REFERENCES :

1. Gropell, J.L. (1984). Tennis for Advanced Players. Champaign, Illinois : Human Kinetics Pub.

2. Kenfield, J.F. (1982). Teaching and Coaching Tennis. Dubuque, Iowa : W.C. Brown Co.

3. Kraft, E. & Conroy, J. (1976). The Tennis Teacher's Guide - Group Instruction and Team Coaching. Princeton, New Jersey : U.S.T.A. Education & Research Centre.

4. Murphy, B. (1975). Complete Book of Championship Tennis Drills. New Jersey : Prentice-Hall, Inc.

5. Tilmanis, G.A. (1975). Advanced Tennis. Philadelphia : Lea Febiger.

COURSE TITLE : Sports MECA - Track & Field (Coaching)

DURATION : 30 hours

LECTURERS : Mr C. Kunalan (CPE)
Miss Evelyn Tan (CPE)

OBJECTIVES : This course is designed to enable student teachers to specialise in track and throw or jump events in Track and Field. Student teachers should be able to teach and coach in the specialised events at Secondary and Junior College levels. Student teachers should also be able to assist in the organisation of Track and Field as an ECA.

SYLLABUS :

1. Correct technique and teaching progression of track and throw or jump events.
2. Conditioning for the specialised events.
3. Rules governing the specialised events.
4. Organisation and promotion of Track & Field as an ECA.

ASSESSMENT :

1. Journal : 60%
2. Examination : 40%

REFERENCES :

1. Adam, G. How to teach the Jumps: A guide to class teachers. London : British Amateur Athletic Board.
2. Arnold, M. (1982). Club Coach, BAAB.
3. Arnold, M. (1983). How to teach track events: A guide for class teachers and coaches in athletic clubs. London : British Amateur Athletic Board.
4. Bompa T. (1983). Theory & Methodology of Training, Kendall/Huat Publishing.
5. Dick, F. (1980). "Sports Training Principles". Lepus Books.
6. Dick, W. F. But First.... British Amateur Athletic Board.

7. Doherty, K. (1980). Track & Field Omnibook, Tafnews Press, (3rd Edition).

8. International Amateur Athletic Federation Official Handbook, (1985/86).

9. Javer, J. (1982). Athletics for Young Beginners. London : Batsford Academic and Educational Ltd.

10. Johnson, C. (1984). Assistant Club Coach, 2nd Edition. London : British Amateur Board.

11. McNab, T. (1978). Modern Schools Athletics, Hodder and Stoughton.

COURSE TITLE : Sports MECA - Track & Field (Officiating)

DURATION : 30 hours

LECTURERS : Mr C. Kunalan (CPE)
Miss Evelyn Tan (CPE)

OBJECTIVES : This course is designed to enable student teachers to officiate in the specialised areas in track and throw or jump events in Track and Field. Student teachers should also be able to assist in the organisation of Track and Field as an ECA.

SYLLABUS :

1. Rules governing the officiating of specialised events.
2. Training for the specialised events.
3. Organisation and promotion of Track & Field as an ECA.

ASSESSMENT :

1. Journal : 60%
2. Examination : 40%

REFERENCES :

1. McNab, T, (1978). Modern Schools Athletics. Hodder and Stoughton.
2. Arnold, M. (1983). How to teach track events : A guide for class teachers and coaches in athletic clubs. London, British Amateur Athletic Board.
3. Adam, G. How to teach the Jumps: A guide to class teachers. London : British Amateur Athletic Board.
4. Javer, J. (1982). Athletics for Young Beginners. London : Batsford Academic and Educational Ltd.