Postgraduate Diploma in Education

English Medium (Weekend) Course

Course Handbook

Introduction:

The Faculty of education, University of Colombo is offering the Postgraduate Diploma in Education, as a part time, self-financing course in the English Medium, In response to the dire need in the system for teachers who are proficient to teach in the English Medium. This course is designed promote academic and professional development of teachers, teacher educators, principals of schools and others in the field of education. By continuing their professional education in the English Medium, teachers and non-teachers enrolled in this course will become proficient to teach in the English Medium, to serve as resource persons in the continuing education of their colleagues.

Objectives:
- To develop graduates of Government schools, Private schools, assisted schools and International schools to become professionally competent.
- To develop graduates who aspire to join the teaching profession by equipping them with necessary professional competencies.

Duration of the Course:

The course is of 18 months duration conducted on weekends, in three semesters each of 15 weeks' duration. In addition, a student has to engage in supervised practical teaching over a 10 weeks period in an educational institution.

Course Content:

PGDE-EM (WE) course consists of three components:
- A. Course work
- B. Teaching practice and
- C. Essay

A. Coursework

	Subjects	No. of Contact hours
1	*Principals & Problems of Education*	*48*
2	*Educational Psychology*	*48*
3	*Comparative Education*	*48*
4	*Educational Measurement & Evaluation*	*48*
5		*48*
6	*Educational Methodology* *6.1 General Methods*	*28*
	6.2 Special Methods (2 Methods)	*12*
7	*Special Areas (2 Areas)*	*24*

Educational Methodology consists of two parts.

Part 1 : General Methods (6.1). Part II : Special Methods (6.2). Students are expected to select General Methods (part i) and two subjects of the following Special Methods (part II).

English, Mathematics, Civics Education, Science, Computer Science, Primary Education, English Literature, Commerce, Geography.

Special Areas

Students are expected to select two subjects of the following Special Areas.

Educational Planning, Environmental Education, Early childhood Education, Educational Counseling, Educational Statistics, Science Education, Information Technology, Educational Technology, Tertiary Education, Sociology of Education

B. Teaching Practice:

Students are expected to engage in Teaching Practice in a school / educational institution for a period of 10 weeks (covering 80 hrs) under such conditions determined by the Dean of the Faculty of education.

C. Essay:

Students are expected to submit an academic essay on a subject within the field of education which is of interest to the student. The topic and methodology has to be approved by a Supervisor appointed by the Dean of the Faculty of Education. Tutorial support will be extended through the course.

Admission requirements:

Individuals possessing a good knowledge of English and the following qualifications are eligible to apply:
(1) A bachelor's degree standing from a recognized University: and
(2) Age below 55 years on first October of the academic year commencing the course.

Examination requirements:

1. The course of study for the Postgraduate Diploma in Education examination shall be of three terms duration, unless otherwise decided by the Senate; and the examination shall be held as soon as possible after the completion of the course of study for the examination.
2. The pass mark in each paper shall be 40% of the maximum marks that could have been awarded for the paper. For the purposes of this part, school practice and the dissertation shall count as two papers.
3. A candidate's performance in each paper shall be grated according to the following scheme:
   Grade A - 70% or more
   Grade B - 55% to 69%
   Grade C - 40% to 54%
   Grade D - 30% to 39%
   Grade E - 29% or Less
4. A candidate shall be deemed to have passed the Postgraduate Diploma in Education Examination if he passes In all papers obtaining in each paper a minimum of 40% of the maximum marks that could have been awarded for that paper.
5. A candidate shall be deemed to have been referred in one paper of the Postgraduate Diploma in Education Examination if the passes in all but one of the papers having obtained a mark of not less than 30% in the paper in which be failed.
6. A candidate shall be deemed to have been referred in two papers of the Postgraduate Diploma in Education Examination if he passes in the all but two of the papers, having obtained a mark of not less than 30% in each of the papers in which he failed.
7. A candidate shall be deemed to have qualified for a Merit pass if he at one and the same Examination passes in all papers securing a minimum grand average of 60% with A grade passes in at least two papers and at least B grade passes in all the remaining papers.

8. A candidate shall be deemed to have qualified for a distinction if he at one and the same examination passes in all papers securing a minimum grand average of 65% with A grade passes in at least four papers and at least B grade passes in all the remaining papers.

9. A candidate shall be eligible for the award of a merit pass or a distinction only where he had taken the Postgraduate Diploma in Education on the first occasion on which he was qualified to take the examination in terms of section 7 of part I unless the Senate for some specifies reason determines that he is eligible for the ward of a merit pass of distinction although he had taken the examination on subsequent occasion.

10. The University shall publish the manes of candidates who have passed the Postgraduate Diploma in Education. All candidates shall be informed individually of the results of the examination and unsuccessful candidates shall also be informed of the subjects in which they had dialed.

11. A candidate who has not fulfilled all the requirements of the Postgraduate Diploma in Education examination by non performance of school practice caused by illness or other physical condition evidenced by a medical certificate acceptable to the Senate shall not be considered to have failed the PGDE examination and shall be permitted to complete the requirements of the Postgraduate Diploma in Education on a subsequent occasion subject to the provisions of section 8 of Part I. The results of such candidate shall, however, be withheld until all the requirements of the Postgraduate Diploma in Education examination have been fulfilled.

12. A candidate who fails the Postgraduate Diploma in Education examination but passes in school practice shall not be required to perform school practice on a subsequent occasion when he takes the Postgraduate Diploma in Education examination.

13. A candidate who fails the Postgraduate Diploma in Education examination but passes in the dissertation shall not be required to Submit a dissertation on a subsequent occasion when he takes the Postgraduate Diploma in Education examination.

14 The results of the examination of a candidate who has failed to submit the dissertation on or before the specified date shall be withheld however, if such a candidate has failed in one paper, this fact will be communicated to him/her to enable him/her to result this subject in the following year in addition to submitting the dissertation.

Medical Leave during examination

➢ If a candidate ill during the period of examination s/he should immediately obtain a medical certificate from the University Medical Officer.

➢ If a candidate is unable to come to the University Medical Officer s/he can obtain a medical certificate from a government or private Medical officer (MBBS). However when such Medical certificates are submitted it will not be accepted without the statement **Not fit sit on the Examination**

➢ If a candidate is unable to personally meet the University Medical Officer, the relevant Medical certificate and other documents should be sent through person to the University Medical officer and be certified by him/her. However this should be done within two weeks of the approved period of leave. Medical certificates produced after this period will not be accepted.

➢ When applying for leave, the candidate should obtain a relevant form the clerk in charge of the course and the certified Medical certificate through the coordinator of the course to the Dean's office as soon as possible.

Attendance

Attendance is required at all lectures and a minimum attendance record of 80% in each subject is a pre requisite for sitting the written examination.

Core Subjects

- Principles and Problems of Education – Part 1 & 2
- Educational Psychology
- Comparative Education
- Educational Measurement & Evaluation
- Educational Administration / Curriculum & School Development

Course Unit: Principles and Problems of education

1. **Expected Learning Outcomes:**
   At the end of the course, the student teacher will be able to:
   1.1   Explain the concept and definitions of education
   1.2   Describe the evolving nature of Education
   1.3   Analyse the philosophical bases of education
   1.4   Explore the dynamics of education
   1.5   Examine the forces and process of socialization
   1.6   Make use different groups in promoting teaching learning in both school and community.
   1.7   Examine the impact of social class on education
   1.8   Develop the role of the teacher toward professional excellence.
   1.9   Promote national integration among different social forces and groups in society.

2. **Content:**

   (A) Principals & Problems of Education – Part1
   2.1   The concept of education
   2.1.1   Philosophical analysis of the concept of education
   2.1.2   Multiple dimensions of education (teaching, learning, training and indoctrination)

   2.2   Aims and objectives of education
   2.2.1   The nature of aims and objectives in Education
   2.2.2   Derivation of aims- individual, national and global
   2.2.3   An inquiry into the educational objectives for Sri Lanka
   2.2.4   Holistic aims of education-religious cultural, ethical, humanistic, economic and vocational

   2.3   Influence of different Philosophies on Education
   2.3.1   Idealism in education
   2.3.2   Naturalism in education
   2.3.3   Pragmatism in education
   2.3.4   Marxist and Neo-Marxists interpretations of education
   2.3.5   Asian thoughts in education (Ancient and Modern)

   2.4   The Concept of Lifelong Education
   2.4.1   Characteristics of lifelong education
   2.4.2   Learning Society and Learning Networks
   2.4.3   Learning needs and for preferred future

2.5   Recent Trends is Education
      2.5.1   Non-formal, Open and Distance Learning
      2.5.2   National and global views of education
      2.5.3   Education and Human Rights
      2.5.4   Education for national integration
      2.5.5   Education for conflict resolution
      2.5.6   Multi cultural education
      2.5.7   Education for the 21st century

(B)   Principles and Problems of Education – Part2

2.6   Education and Socialization
      2.6.1   The concept of Socialization
      2.6.2   Relationship between Education and Socialization
      2.6.3   Agents of Socialization – family, school, community, peer group, religious bodies and mass media.
      2.6.4   Crisis in socialization in contemporary society with special reference to changing pasterns of family and the impact of printed and electric media.

2.7   Social Groups and Education
      2.7.1   The definition of 'group' in society
      2.7.2   Effects of group behavior on Education
      2.7.3   Formal and informal groups

2.8   Social Stratification and Education
      2.8.1   Definition of Social class
      2.8.2   Measuring social class
      2.8.3   Effect of social class on education
      2.8.4   Importance of family background on education
      2.8.5   Compact and factors influencing social mobility
      2.8.6   Sanskritization of the individual person
      2.8.7   Education and social mobility with special reference to Sri Lanka

2.9   Education, Social and Cultural Change
      2.9.1   Relationship between education and social change
      2.9.2   Education for social change- modernization ideals post modernization
      2.9.3   Education and Cultural change
      2.9.4   Patterns of social change
      2.9.5   National Identity and World Citizenship

2.10 Professionalization of Teachers
      2.10.1 Teacher's role in contemporary school and community
      2.10.2 Duties, responsibilities and rights of teachers
      2.10.3 Development of a professional culture among teachers
      2.10.4 Code of ethics for teachers
      2.10.5 Teacher as a catalyst
      2.10.6 Teacher as a self directed earner

Course Unit: Educational Psychology

1. **Expected Learning Outcomes:**

   At the end of the course, the student teacher will be able to:
   1.1   Understand the individual as a developing organism
   1.2   Understand the nature and processes of learning
   1.3   Design and conduct appropriate interventions to facilitate learning
   1.4   Comprehend the cognitive processes in learning and problem solving
   1.5   Mediate in special needs of learners

2. **Content:**
   ## 2.1 Scientific study of Psychology
   2.1.1   Definitions, scope, history of the field of Psychology
   2.1.2   Methods of study in psychology

   ## 2.2. Human development
   2.2.1   Factors in Development
   2.2.2   Stages and characteristics of development

   ## 2.3. Personality
   2.3.1   The nature and processes of personality development
   2.3.2   Techniques of assessment and development of personality

   ## 2.4 Motivation
   2.4.1   Theories of motivation
   2.4.2   Motivation as a factor in learning
   2.4.3   Techniques of motivation

   ## 2.5 Learning
   2.5.1   The nature and processes of learning
   2.5.2   Theories and principals of learning
   2.5.3   Techniques of mediating in the learning process

   ## 2.6 Cognitive processes in learning
   2.6.1   Intelligence and aptitude
   2.6.2   Attention, perception, concept formation
   2.6.3   Thinking and problem solving
   2.6.4   Language
   2.6.5   Creativity and giftedness
   2.6.7   Transfer of learning

   ## 2.7 Attitudes, interests and values

   ## 2.8 Special needs areas
   2.8.1   Developmental needs
   2.8.2   Behavioral and other special needs

Course Unit: Comparative Education

1. **Introduction to the course – Scope of Comparative Education**

   II. **Section A Genera**

   1. **Factors and Problems in education**
      (i) Education in plural societies – race, language, religion
      (ii) Education and the social structure
      (iii) Education and the economy, economics of Education, and educational planning in
         (i) Developed countries
         (ii) Developing countries, with special reference to Asia
         (iii) Education and political ideology

   2. **Contemporary Education system**
      (i) The Educational systems of countries such as India, UK, USA, U.S.S.R., Peoples republic of China, Japan.
      (ii) Current trend in Education – Administration structure, content and provision.

   III. **Section (B) Education in Sri Lanka**

   1. Review of the history of Education in Sri Lanka
      (i) Educational traditions of Sri Lanka till the 16th century
      (ii) The impact of Postgraduate and Dutch education
      (iii) British Colonial policy (1796-1832) political, economical, social aspects
      (iv) The first phase of British colonial education (1796-1832)
      (v) From Colebrooke to Morgan (1832-1867)
      (vi) The Morgan Report
      (vii) The administration and control of education (1870-1930)
      (viii) The medium of Instruction (1870-1930)
      (ix) The development of educational system –elementary, secondary, vocational, higher 1870-1930
      (x) The state Council era (1931-1947)
         (a) The Political, economic and social background
         (b) Educational developments
            1. Expansion of education and developments in regard to the medium of instruction
            2. The school structure, elementary and secondary
            3. The development of secondary, vocational and tertiary educational institutions
      (xi) Education after independence (1947 onwards)
         (a) The political, economic and social background
         (b) Administration and control of education
         (c) Expansion of education and developments in regard to the medium of instruction
         (d) The school structure elementary and secondary
         (e) The development of secondary, vocational and tertiary educational institutions

   2. **Contemporary education in Sri Lanka**
      1. The present education system, provision and structure
      2. Current problems in education e.g. drop-outs, imbalances, educated unemployment

Course Unit: Educational Measurement & Evaluation

1. **Expected Learning Outcomes:**

   At the end of the course unit, the student teacher will be able to:
   1.1   Understand the role of assessment in the teaching learning process
   1.3   Use different types of assessment techniques in the class room
   1.3   Comprehend/ understand the descriptive statistical techniques that could be used in Educational Assessment
   1.4   Apply statistical techniques to assess data
   1.5   Enhance ability to construct measuring instruments in cognitive non cognitive domains and Psychomotor Domains
   1.6   Administer assessment procedures in practical situations

2. **Content:**
   2.3   The role of assessment and evaluation
   The nature of assessment and evaluation
   The role of assessment in teaching learning process
   Ethnical considerations of assessment

   2.4   Types of assessment
   Formative and summative assessment
   Norm referenced and criterion referenced assessment
   Cognitive and non cognitive testing
   Achievement and aptitude testing

   2.5   Qualities desired in assessment tools
   Reliability
   Validity
   Practicality
   Comparability

   2.6   Assessment of cognitive ability
   Classification of Educational objectives – B.S. Bloom's Taxonomy of educational objectives

   2.7   Assessment techniques of cognitive abilities
   Writing objectives to measure learning outcomes
   Supply type tests: Essay, short answer
   Selection type tests: Matching items, Binary choice items, Multiple-choice items & others

   2.6   Assessment of affective characteristics
   Taxonomy of affective domain Krathwohl's taxonomy
   Techniques of assessment: Observation schedules, rating scales, Attitude scales, Check-lists, Interviews
   Techniques of personality measurement

2.7 Assessment of psychomotor abilities

Taxonomy of psychomotor domain Simpson's taxonomy

Assessment techniques of psychomotor behaviors

Performance tests, Process and product evaluation

2.8 Analysis and interpretation of test scores – 1

Scales of measurement

Frequency distributions

Measures of central tendency

Measures of variability

Measures of relationships

2.9 Analysis and interpretation of test scores – 2

Construction of graphs

Frequency Polygon, Histogram, Cumulative Frequency

Standard scores, T Scores

Grade equivalent Scores

Grade Norms, Age Norms , Percentile Norms

2.10 Current trends in assessment

School based evaluation

Project evaluation

Course Unit: Educational Administration

1. Administration theory and theories of organization: their application to educational administration.
2. Legal basis for public education in Sri Lanka; recent developments and their impact.
3. Educational administration , in Sri Lanka an overview of problems and prospects, aspects of public administration and development administration relevant to educational administration
4. Identification of some policy issues and policy matters in education; consideration of interplay of interest groups and how they shape educational policy; organizational options for policy implementation.
5. Management of educational change and innovation, with particular reference to developing countries; organizational response to planning educational change and innovations.
6. Organization and functioning of the Ministry of Education, Regional Directorates   and ancillary services; educational administration at Circuit level; educational supervision.
7. Internal organization and management of educational institutions; the role of the Principal, the Deputy Principal and Sectional Heads in the context of school organization and administration; inter- personal management; management of ancillary services; school community relations.

8. Educational planning ; relevance for school administrator at system and institutional levels; aspects of planning systems; cost effectiveness analyses ; PPBS; constraints in planning and plan implementation in education; uses of systems analyses.
9. Educational finance in Sri Lanka.
10. Administration, management and financing of vocational educational institutions and non formal education in Sri Lanka.
11. Administration Management and financing of tertiary educational institutions.
12. Administration of educational systems in four other countries, selected from India, Japan Australia, France, U.S.A., U.S.S.R., and a developing nation.

Course Unit: Curriculum Development & School Organization

1. **Expected Learning Outcomes**

At the end of this course unit, the student teacher will be able to :

1.1 Define the concept of Curriculum and understand the place of Curriculum in the educational process
1.2 Make use of curriculum theory to interpret s Curriculum
1.3 Provide skills to implement a curriculum at class room level
1.4 Appreciate the need for evaluation and periodic revision of a Curriculum

2 **Content:**
2.1 The curriculum and its significant place in the educational process
2.2 What is a curriculum? Using several definitions, arrive at a working definition of the term
2.3 Significant factors that influence a curriculum, Educational, Philosophical, Social, Philosophical Cultural , Political, Scientific and Technological factors and their relative influence on the curriculum
2.4 Developing a curriculum Brief history of curriculum construction before and after 1949
2.5 Curriculum development models based on identified weaknesses, Models of Tyler, Halliwell, Kerr and Lawton
2.6 Educational objectives for a curriculum and the need to establish a relationship between the specific classroom objectives, educational aims and National Goal
2.7 Se3lection of learning experiences ; criteria for selection of learning experiences
2.8 Selection of Content
    The problem of selecting content and criteria for selection
2.9 Development of the teaching learning situation
    Organization and integration of content with curriculum experiences
    Organizational patterns such as subject centered, core, activity and integrated
2.10 Curriculum evaluation
    Latest definitions on Curriculum Evaluation
    Need for formative and summative evaluation
    Curriculum evaluation process
    Feasibility, effectiveness, educational values
2.11 Critical examination of the total school curriculum in Sri Lanka- past and present

Methodology of Teaching

Educational Methodology
Primary Education
Methods of Teaching English
Methods of Teaching Geography
Methods of Teaching Mathematics
Computer Education
Methods of Teaching Science
Methods of Teaching Civic Education
Methods of Teaching Literature
Methods of Teaching Commerce

Course Unit: Educational Methodology

Part I General Methods of Teaching

1. General Methods - its place in the educative process
   The teaching system in relation to curriculum development system; characteristics of the teaching - learning situation; concept of method; idea of a general method

2. Development of Unit
   General classification of units; characteristics of a good unit; how to prepare a good unit; how shall a teacher guide the unit activities?

3. Lecture as a teaching method
   Merits and demerits of the lecture method; improvements possible; lecture - discussion; lecture demonstration etc.

4. Problem solving
   Nature of thinking and problem solving; the inductive and deductive approaches; techniques of problem solving ; models of the process; applications to the teaching learning situation.

5. Group methods of instruction
   The project method as a development of the problem solving approach; steps in a project; group work and group learning; the group project; team teaching; micro teaching, simulation and gaming.

6. Individualized teaching
   Assignments; the properties of an assignment; types of assignments; techniques of evaluation; programmed instruction viewed as individualized teaching situation.

7. Techniques of teaching
   Strategies and techniques the teacher may use in the teaching learning situation; degree of control; highly structured and loosely strutted situations; didactic teaching and discovery learning; teaching for understanding ; teaching for transfer; meaningful learning; types of questions; oral questioning ; guided questions; leading questions; motivating questions etc.

8. Educational technology and the teaching learning situation
   Fundamental Ideas; viewing the teaching learning process from a systems approach for optimum outcomes from available resources; instructional materials; audio visual aids ; types of material and their characteristics; their advantages and disadvantages; their construction and uses.

9. The teacher's function in modern education
   Planning of lessons; braking up of the unit and writing of lesson notes; the teacher's personal equipment; academic preparation; preparation for co-curricular activities; the teacher's civic responsibilities.

Course Unit: Primary Education

The Broad aim of this course is to give the student teacher and understanding of the role of the Primary Education in the total education setup and to appreciate its place in laying a first foundation in future development.

1.0 Expected Learning Outcomes:
   1.1 Aware of the nature, scope & context of Primary Education
   1.2 Understand the General and Global objectives of Primary Education
   1.3 Familiarized with the future trends & development of Primary Education
   1.4 Develop an awareness about teaching methods and approaches to Primary Education.
   1.5 Aware of managerial skills and competencies required for Primary Education
   1.6 Aware of managerial role in Primary Education

2.0 Content:
   2.1 Definition of Primary Education and concept of Primary Education
   2.2 Nature, Scope & Purpose of Primary Education
   2.3 Objectives and aims of Primary Education in the Local Context & Global Context.
   2.4 Primary Curriculum in a changing society and Primary Education for 21st century
   2.5 Development & reforms in Primary Education in Sri Lanka
      2.5.1. 1948 -1972 Primary Education
      2.5.2. After 1972 Innovation & new reforms in Primary Education in Sri Lanka according to National Education Commission reforms
   2.6 Latest methods & Approaches in Primary Education according to New Reforms
   2.7 Developing Resources and Material for classroom setup
   2.8 Role of the Primary Teacher in the 21st century
   2.9 Managerial role in Primary Level setup and recent models

Course Unit: Methods of Teaching English

1. Objectives of teaching English as a Second Language in Sri Lanka, sociological, linguistic and pedagogical stances.
2. Language acquisition of the mother tongue; the different conditions under which adults second or foreign language.
3. Areas of difficulty in sounds, structure, the lexical system and semantics.
4. The concept of method, grading, selection, presentation and repetition
5. English Teaching Methods, the direct method the Bilingual methods and the Reconstruction Method.
6. Class room procedure in comprehension, composition and speech.
7. Correlation in English language teaching
8. English Language testing

Course Unit: Methods of Teaching Geography

1. Definition of geography - its nature and purpose
2. Objectives for the teaching of geography
3. Principles underlying syllabus construction
4. Geographical elements in the social studies syllabus   - a critical analysis
5. Approaches to the teaching of geography
    Regional approach
    Systematic approach
    Statistical approach
    Audio -visual aids method
    Field studies and surveys
    Discussion method
    Problem - solving method
6. Problem - solving method Developing skills in practical work Representing physical features through maps.
7. Evaluation of geographical elements in the social studies syllabus and the geography syllabus for the G.C.E. (Advanced Level.)
8. Development of attitudes - e.g. geography for national integration and international understanding
9. The Geography Room

Course Unit: Methods of Teaching Mathematics

1. **Learning outcomes:**
    1.1 Broaden their concepts on Mathematics by Discussing the nature, construction, and the utility of mathematics.
        Discussing the nature, construction, and the utility of mathematics.
        Analyzing the ideas of philosophers on mathematics and studying the historical development of mathematics.

    1.2 Develop inquisitiveness on efficient development of mathematical concepts in children through.

The Exposure of student of psychological findings on the Development of Mathematical Concepts put forward by piaget, J. Buner, J,S. and Skemp,R.
Inquiring into the Psychosocial Needs of Children

1.3 Engage in studies on School mathematics curriculum as a whole or at Various stages or sections by,
    1.3.1. Inquiring into aims and Objectives, Contents, Delivery Systems, Student performance, Strengths and Weaknesses of procedures in curriculum implementation and quality improvement of examination.
    1.3.2. Conducting research on Mathematic Curriculum.
    1.3.3. Studying about the mathematics curricula of recent years in Sri Lanka and other countries like India, England, nad Japan.

1.4. To develop Mathematical concepts efficiently and effectively through the discussions of the nature and scope of the existing curriculum and evaluation techniques in the class room.
    1.4.1 Design educationally justifiable learning sequences
    1.4.2 Plan lessons efficiently and effectively using the facilities available in the school.

2 Content

2.1 Introduction
What is mathematics, why we learn mathematics, values of learning mathematics, utility value for citizenship for the non mathematician and for the future mathematician, the cultural value of mathematics, place of mathematics in the school curriculum
    2.1.1. as a body of knowledge
    2.1.2. as mathematical skills
    2.1.3. as mathematical attitudes and
    2.1.4. thinking mathematically

2.2 The nature structure construction and the utility of mathematics
Conceptuality, rigidity, abstractness, self discipline, maturity, sequential authority, inductive and deductive reasoning formality structure and construction of mathematical concepts changing nature of mathematics, nature of mathematics a s an art a science a language helpfulness for learning other subjects personal qualities formed by mathematical thinking.

2.3 Ideas of various philosophers about mathematics.
Historical development of mathematics at different eras; Babylonian, Egyptian, Greek, Hindu, Arabic and recent.

2.4 Basic Mathematical concepts
Concepts and their development theories of concept formation, some examples of basic mathematical concepts, Primary secondary and higher order their development special emphasis on the work of piaget bruner skemp.

2.5 School curriculum
The nature of mathematics curriculum today, recent developments psychosocial background of a Sri Lanka child, sub cultures modes of delivery evaluation techniques and procedures sources and resources available constructions new approaches of teaching mathematics attitudes towards mathematics.

Course Unit: Computer Education

1.0   Expected Learning outcomes:

At the end of the course unit, the student teacher will be able to:

1.1   Develop knowledge, skills and uses of computers in education to establish a practicing teachers as a proficient user of computers in education and as a leader in the school community for the uses of and the management of computers in education
1.2   Aware of computing as an intellectual discipline
1.3   Aware of current issues in educational computing and related fields.
1.4   Fluent as a computer user in enhancing learning
1.5   Aware of the wider impact of computing.
1.6   Fluent as computer user in support and development roles.

2.0   Content:

2.1   Introduction to computing in schools
School computer resources, usage of computers in the school setting, effectiveness of the implementation of computing policies, roles and availability of human resources. The effectiveness use of software across the curriculum. The importance of computers in teaching and learning.

2.2   Computer Programming for Education
Basic process involved in software construction, key components and operations of computer languages, fundamental principles of software design and structure, basic elements of programming.

2.3   Evaluation of Education software
Classification of software in terms of content, process and level of difficulty, computer based learning packages, the use and evaluation of educational software teaching learning activities.

2.4   Computer- mediated Communication.
Communication networks. The implications and values of computer meditated communication, varieties and uses of a wide range of communication devices and tools, use various Would Wide searcl machines to conduct research and uses of the internet.

2.5   Technology in Society
Key issues in social commentary on computers, computing and technology from an educator's perspective, explanations on current ideas, critiques and trend in a form suitable for the school community, the place of technology in modern society.

2.6   Computer use in Educational Management
Data base definition and data entry, selection, sorting and reporting construction of a base, spreadsheet definition, procedures in systems analysis, use of micro computers in Educational Management.

2.7   Facilitating Computers in Education.
Application of learning in computer based instruction.

Course Unit: Methods of Teaching Science

This course introduces to the student the strategies of teaching & learning Elementary Science under the present of science & Technology.

1. **Learning Outcomes**

   At the end of this course the student will be able to:
   - 1.0 Perceive the real Nature of Science, the Scientific method and the related processes.
   - 1.1 Develop further, the process skills and positive attitudes related to Science.
   - 1.2 Identify and develop the necessary skills about the different approaches to teaching Science.
   - 1.3 Identify and manage the resources available locally to teach Science.
   - 1.4 Develop skills for evaluating Science learning and teaching

2. **Content:**

   - 2.1 Introduction as to what Science is:
     The nature of Science: The scientific method and the related processes. The Scientific attitude and the attitude towards Science. The products of Science. The limits of Science.

   - 2.2 The need for and Education in Science, Scientific literacy for the ordinary citizen of the today and a proper Education in Science for the future scientists and professionals at different levels.

   - 2.3 Role of the Science teacher as a learning facilitator.

   - 2.4 The curriculum approaches to teaching Science at the junior Secondary level.
     - 2.4.1 Integrated Science
     - 2.4.2 Combined Science

   - 2.5 Review of the present junior secondary science programme in Sri Lanka.

   - 2.6 Development of Scientific Concepts.
     Concepts and their development, Theories of concept formation especially based on how children learn science concepts (the constructivist view)

   - 2.7 Methods and Techniques of teaching science different approaches available for making students learn science or do science. Inquiry oriented activity methods, Discovery methods, problem solving, projects and assignments involving field activities. Planning Units and lessons for teaching science.

   - 2.8 Laboratory Technology
     The science laboratory and its physical resources. The concepts of mini- laboratory and Open laboratory, Laboratory organization and management. Improvisation of apparatus perpetration of other learning materials.

   - 2.9 Co -Curricular activities in Science.
     Science societies, science exhibitions, science Magazines Field trips and other leisure activities in science.

2.10   Evaluation of Science learning.
          Process evaluation and the evaluation of overall attainment.
          Construction and use of objective tests.

2.11   Discussions / Demonstrations / Tests

Course Unit: Methods of Teaching Literature

1. Expected Learning Outcomes

At the end of the course the students will be able to;

- Identify Literary competencies
- Exploit the literary texts to develop language skills
- Differentiate genre and distinguish the features of each genre
- Write lesson plans to each English Literature
- Examine main features in poetry and prose
- Analyze the social, cultural and political issues in prose and poetry
- Recognize the attitude of the writer
- Use literary texts to develop literary competencies of the students
- Develop learner centered approaches to teach literature

Syllabus

1. Literature in ESL classroom
    1.1 Literature and Language
    1.2 Aims of teaching Literature
    1.3 Literary competence

2. Teaching Poetry
    2.1 Poetic techniques
    2.2 Approaches
    2.3 Issues and attitudes in poetry
    2.4 Developing literary competencies through poetry (practical sessions)

3. Teaching Prose
    3.1 Components of short story and novel
    3.2 Themes and issues in prose
    3.3 Techniques of teaching prose
    3.4 Developing literary competencies through prose (practical sessions)

4. Writing Lesson plans to teach prose and poetry in the classroom

Course Unit: Methods of Teaching Civic Education

Objectives

The student will be able to;

1. Understand the objectives of the new subject Civic Education
2. Acquainted with the content of Civic Education at secondary school language
3. Use deferent approaches. Methods and strategies to teach Civic Education
4. Adopt suitable assessment methods to evaluate students achievement

1. Definitions of Civic Education
   (a) Unity of Knowledge
   (b) The dependence of Civic Education on open subject areas
   (c) Concept of integration in the present school curriculum
   (d) Concept and structure

2. (a) The importance of incorporation Civic Education in the Secondary School curriculum in relation to the National Educational aims
   (b) A critical analysis of the present Civic Educational curriculum in Sri Lanka

3. The factors that determine the success of Civic Education course
   (a) Teacher   (b) Pupil   (c) Society

4. Methods of Teaching Civic Education. Student activities and teaching aids.
   1. Project Method and Civic Education
   2. Importance of discussion
   3. Comparative learning
   4. Field study observation, collection of data, training for independent study, training of different skills
   5. Use of problem solving method
   6. Use of texts
   7. Use of community resources for data collection
   8. Construction and use of maps. Graphs and exhibits
   9. Dramatization
   10. Educational trips
   11. Debates
   12. Civic Studies room (source material)
   13. Field book
   14. Museums

5. Civic Education and team teaching

6. Building up of concepts, attitudes and skills
   (i) Individual and social
   (ii) International understanding

7. Building up of a lesson unit
    (i) Organization of lesson based on units with special leaning outcomes
    (ii) Planning lessons based on verbal instruction and activity

8. Evaluation
    (a) Intellectual skills
    (b) Affective skills
    (c) Psycho-motor skills
    (d) Methods of evaluation (continues evaluation test continuous evaluation. Objective test. Structural and type questions

Course Unit: Special methodology of teaching Commerce

1.   Expected Learning Outcomes

At the end of the course unit, student will be able to;
- Describe historical background of commerce curriculum in Sri Lanka
- Analyze aims and objectives of commerce curriculum at school level
- Identify key elements of school level commerce curriculum
- Select appropriate methods and techniques for teaching commerce subjects
- Effectively utilize teaching aids in teaching commerce
- Behave commerce teachers as a role model for commerce students
- Prepare most appropriate lesson plans for teaching of commerce subjects

2.   Content:

1.   Historical background of commerce curriculum in Sri Lanka
- Commerce education before colonial period
- Commerce education after colonial period
- Commerce education after independence
- Commerce education after introduction of open economy

2.   Objectives of commerce curriculum
- Aims and objectives of teaching different subjects of commerce stream
- Aims, values and competencies related to commerce education
- Analyze instructional objectives of commerce subjects and compare with the work of world

3.   Commerce curriculum
- Nature of curriculum of the subjects of commerce stream at school level
- Co curriculum in commerce stream at school level
- Nature and organization of co curricular activities at school level
- Challenges faced by teachers in implementing recommended commerce curriculum and co curriculum

4. **Methods and techniques of teaching commerce subjects**
   - Teacher centered teaching methods and student centered teaching methods
   - Application of lecture method, discussion method, project method, assignment method, problem solving method, case study method, field trip method, survey method, etc.for teaching commerce subjects
   - Characteristics of good teaching method
   - Techniques of teaching commerce

5. **Utilization of teaching aids in teaching commerce**
   - Classification of audio video teaching aids in teaching commerce
   - Meaning, significance and advantages of teaching aids
   - Principal in the use of teaching aids
   - New technological instruments use as teaching aids in teaching commerce
   - Difficulties and problems in the use of teaching aids at school level

6. **Role of commerce teacher**
   - Nature of the role of commerce teacher at school level
   - Important characteristics of commerce teacher
   - Training and development opportunities for commerce teacher
   - Commerce teacher as a role model for commerce students

7. **Lesson planning for teaching of commerce subjects**
   - Important of lesson planning
   - Lesson planning models
   - Nature of lesson planning for teaching commerce subjects at school level
   - Challenge in planning and implementation of lesson plans in teaching commerce subjects

8. **Evaluation and assessment techniques in commerce subjects**
   - Nature of evaluation and assessment of students performance at school level
   - Formative and summertime evaluation techniques used in commerce subjects

9. **Current trends in teaching commerce subjects**
   - New trends in teaching commerce at local level
   - New trends in teaching commerce at international level

Special Areas in Education

Early Childhood Education

Educational Guidance & Counseling

Educational Planning

Educational Statistics

Environmental Education

Educational Technology

Tertiary Education

Sociology of Education

Science Education

Information Technology

Course Unit: Early Childhood Education

1.0   Expected Learning outcomes:

At the end of the course the student teacher will be able to :

1.1   Comprehend the developmental and theoretical bases of Early Childhood Education
1.2   Understand the different approaches / models of ECE
1.3   Analyses critical issues in ECE

2.0   **Content:**
   2.1   Introduction to Early Childhood Education- Definitions, Concepts, Theoretical bases of ECE
   2.2   Development during early childhood - Pre natal period infancy
   2.3   ECE childhood - (2-5 years)
   2.4   ECE approaches/ models
   2.5   Curriculum and methods of ECE
   2.6   Issues in ECE with special reference to Sri Lanka

Course Unit : Educational Guidance & Counseling

1.0   Expected Learning Outcomes:

At the end of the course the students will be able to:

1.1.   Understand basic counseling issues, ethical standards and needs of a school counseling service
1.2.   Gain Knowledge of advance theories and techniques of school counseling
1.3.   Gain assessment skills for understanding the child and his psychological, educational and career problems
1.4.   Acquire knowledge and ability to practice as a educational counselor in the school setting

2.0   Content:

2.1.   Needs of school psychological counseling service and career counseling service in Sri Lanka

2.2.   Theoretical foundation of counseling

2.3.
      2.3.1.   Psychological counseling
      2.3.2.   Educational counseling
      2.3.3.   Family counseling
      2.3.4.   Career counseling
      2.3.5.   Other areas pf counseling

2.4.   Basic Techniques of Individual Counseling
      2.4.1   Psychological Techniques
      2.4.2   Educational Techniques
      2.4.3   Career and family Techniques

2.5.   Techniques of interview
      2.5.1.   Perceptual - Phenomenological
      2.5.2.   Analytical
      2.5.3.   Behavioral
      2.5.4.   Rational
      2.5.5.   Existential

2.6   Techniques of Group Counseling
      2.5.1.   Small groups
      2.5.2.   Marathon groups

2.7   Techniques of career Counseling

2.8   Stages of a Individual Counseling session

2.9   Practical component
      2.9.1   Essential basic counseling skills of a school counselor
            Attending
            Listening and understanding
            Questioning
            Analysis
            Termination and planning
      2.9.2   Referrals
            Professional counselor
            Psychologist
            Psychiatrist

2.10   Writing of a referral report (practical)

2.11   Planning and maintaining a counseling centre
      2.11.1   Psychological counseling
      2.11.2   Career counseling

2.12   Maintaining professional counseling relationships with other agencies
      2.12.1   Parents
      2.12.2   School Administration
      2.12.3   Professional counselors/ Psychologists/ Psychiatrists
      2.12.4   Other counseling agencies in the area
      2.12.5   Hospital/ Psychological Medicine Unit

Course Unit: Educational Planning

Educational Planning examines the theory and practice of educational planning in relation to policy making and change in educational organizations. It offers practical guidelines and techniques in educational planning at macro level as well as micro level.

1.0   Expected Learning Outcomes :

At the end of the Course Unit the student will be able to :

1.1   Understand the theoretical foundation and basic concepts of educational planning
1.2   Develop practical skills at macro and micro level educational planning
1.3   Understand the concept of EMISP
1.4   Collect, analyse, interpret and apply data generated by various source in educational planning
1.5   Identify and suggest ways of minimizing wastage at school level
1.6   Develop an attitude to use modern planning techniques of improving efficiency and effectiveness in the education system

2.0   Content:
2.1   Concept of planning
      2.1.1   Definition of planning
      2.1.2   Educational planning and its definition
      2.1.3   Integration with socio- economic and political factors
      2.1.4   Crisis in modern educational planning
      2.1.5   Emergence of strategic planning

2.2   Educational Planning Approaches:
      2.2.1   Social Demand
      2.2.2   Cost - benefit
      2.2.3   Manpower
      2.2.4   System analyses
      2.2.5   Non traditional approaches

2.3   Macro level educational planning
      2.3.1   Educational planning process
      2.3.2   Need of demographic data base
      2.3.3   Educational planning at national level in Sri Lanka

2.4 Micro Level Educational Planning
- 2.4.1 Need for micro level planning
- 2.4.2 Project planning
- 2.4.3 Institutional planning
- 2.4.4 School mapping

2.5 Use of Modern Technology in Educational Planning

2.6 Planning for efficiency and effectiveness in Education
- 2.6.1 Concepts of efficiency and effectiveness
- 2.6.2 Identification of wastage in school setting
- 2.6.3 School based action planning

2.7 Educational Management and Information System
- 2.7.1 Concept of EMIS
- 2.7.2 Identifying sources of data
- 2.7.3 Development of a data base at school level

2.8 Challenges of Planning and Implementation in Sri Lanka

Course Unit: Educational Statistics

Introduction

This programme of studies provides a standard advanced course in statistics in which the emphasis is on practical application. It is expected that the students possess a basic knowledge of elementary statistics to follow this course of studies.

1.0 Expected Learning Outcomes:

At the end of the course unit,
1.1. The student will be able to understand advanced statistical concepts and statistical concepts and   statistical techniques
1.2 The student will gain a working knowledge of the utilitarian aspects of selected statistical techniques
1.3 The student will gain knowledge and ability to apply statistical techniques in the analysis and interpretation of research data and other valuable data specially in the field of education and psychology and generally in other areas of knowledge

2.0 Content :
2.1 Measures of central tendency and measures of deviation

2.2 Normal distribution and Binomial distribution

2.3 Correlation of variables
- 2.3.1. Spearman Rank Correlation Co-efficient
- 2.3.2. Pearson Product Moment Correlation Co efficient
- 2.3.3. Bivariate frequency distribution Correlation
- 2.3.4. Significance of Correlation Co- efficient

2.5 Linear Regression and Prediction
    2.4.1. Simple linear regression equation
    2.4.2. Partial Correlation
    2.4.3. Multiple Correlation

2.6 Sampling distribution and hypothesis testing (Large & Small samples)
    2.6.1 Sampling distribution of means
    2.6.2 Sampling distribution of differences of means and hypothesis applying the two distributions

2.7 Non Parametric Statistics
    2.7.1 Chi- square distributions
    2.7.2 Sign Test
    2.7.3 Phi-co-efficient
    2.7.4 Bisexual Co-efficient

2.8 One way Analysis of variance and Two way Analysis of variance

2.9 Introduction to Computer Package for Analysis of data

Course Unit: Environmental Education

1.0 Expected Learning Outcomes:

At the end of the course unit the student will be able to:
1.1 Perceive of the Environmental situation today form a local and global perspective
1.2 Impart Environmental Education by adopting suitable methodology in schools
1.3 Act as pioneers in conducting Environmental education programme for their local community
1.4 Contribute actively in solving environmental problems in their localities

2.0 Content:
2.1 The need for environmental Education
2.2 Guiding Principals for Environmental Education Programme
2.3 Environmental Education for
    2.3.1 The formal Education system
    2.3.2 Non formal & informal educational processes
2.4 Environmental concepts & Principals,
    2.4.1. Consideration's of energy and matter in an ecosystem
    2.4.2. The biological community looked at from the basic aspects
    2.4.3. The man made environment, the activities of man and its effects on the environment
    2.4.4. Natural resources, their utilization and conservation, the concept of sustainable development
    2.4.5. UNNCED, the Earth Summit, Agenda 21 and the follow up activities, the IEEP
    2.4.6. The National Environmental act and the CEA activities
    2.4.7. Group discussion/ presentations / assignment /tests

Course Unit: Educational Technology

1. **Learning outcomes:**

The student will be able to trace definitions, content & need for Educational Technology today.
The student will realize the value of Educational Technology in the teaching learning process.
The student will be expected to a cast array of teaching - learning aids based on Dale's Cone of Experiences.
The student will plan, design, implement and evaluate instruction systematically utilizing a variety of instructional materials.
The student Acquire will practical skills in the production, organization and evaluation of instructional materials.

2. **Content:**

The need for a Technology of Education
Three explosions experienced since world war II
- Population
- Knowledge
- Aspirations

Problems faced by Educational systems as a result.
Solutions attempted - Short Term and Long Term
Emergence of Education Technology
Definitions of Educational Technology
"soft ware" and "Hard ware" definitions
Definitions offered by
- England
- U.S.A.

2.2.3. Accepted definition today.
Teaching - Learning process and the value of Dale's cone of educational experiences.
Development of main concerns of Educational Technology

2.4.1. Elton Model - How Research, development , an application for Communication instruments used in the educational process.

2.4.2. Utilization of Educational Technology for
- Individual learning
- Group learning
- Mass learning

Theoretical Knowledge and practice in
Non projected Aids
Projected Aids
Radio Lessons
Audio Tape Recorder
Television
Video - Tape Recorder

Computer
Latest tools in Education

Language Laboratory
Recorded Radio Lessons for Individual Learning
Programmed Instruction - P.I.
Educational Television - ETV
Computer Assisted Instruction - CAI
       2.7. Distance Education today.

Course Unit: Tertiary Education

(i)   Scope, development and significance of tertiary education

(ii)   Polytechnical education at tertiary level
      (a) Junior Universities or Two year Colleges - aims, organization, curriculum, teaching and evaluation techniques.
      (b) Teacher education - aims, organization, curriculum, school practice, pre services and in service education, evaluation.
      (c) Vocational education - the training of the skilled worker, programmes of study and evaluation; apprenticeship training, non forma education.
      (d) Technical education - the training of the technician; programmes of study and evaluation, polytechnics; in service training.

(iii)   Higher education ; universities
      (a) Aims and objective of university education
      (b) Control; academic freedom and public accountability
      (c) Patterns of structure, organization and administration
      (d) University curricula, teaching and evaluation techniques
      (e) University reforms

(iv)   Higher education: Technological education; different routes; institutions; curricula internship; professional training

(v)   The role of extension services in tertiary education mass media; correspondence courses; evening, night and week-end course

(vi)   Administration in tertiary education - nature, significance and issues

(vii)   Innovations in the field of tertiary education e.g. Open University, University without walls. International university

(viii)   Problems of teachers in tertiary education

Course Unit: Sociology of Education

(i)   Meaning, nature and scope of Sociology of Education.

(ii)   Education as culture transmission; education and social change

(iii)   Agents of Socialization

> The Family
> The peer group
> The school
> The community
> Mass media

(iv)   The Sociology of the school, e.g. the school as a social institution; social interaction; the culture of the school; the social role of the teacher

(v)   The school and the community

(a) Discovering, mobilizing and utilizing, community resources for educational purposes
(b) The role of the school in community development and as a center of cultural and social life
(c) School and social values; concepts of the school

(vi)   Education and social mobility
Educational opportunities; education and social class

(vii)   Social research and methodology
Practical work

A social survey

Practicum (Teaching Practice)

During the ten-week period of observed teaching practice. Diploma students are expected to teach in a school in conformity to the school curriculum and syllabus. They will be entrusted with a minimum of 10 periods / 8 hrs teaching per week. During this period of practical teaching, they are strongly urged to put into effect the principals and approaches acquired during the theoretical sessions of the first term. They will be observed, supported, evaluated and grated by a supervisor individually.

Minor Dissertation

A written dissertation on a subject within the field of education of interest and relevance to the Diploma student concerned need to be presented before the end of the course. The topic will be arrived at in consultation with the lecturer in change. The dissertation should be the candidates' original work and a declaration to this effect should be typed on the page immediately following the title page.

Declaration

" I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree of diploma in any University and to the best of my knowledge and belief it does not contain any material previously published or written by another person except when due reference is made in the text".

Signature of the candidate

The form indicating the tutor's approval of the topic should be placed before the title page of the dissertation.

Since the dissertation demands a considerable degree of reading and planning and also because it forms a crucial part of the examination students are requested to choose a topic and lay the ground work fairly early. In typing the dissertation you should bear in mind the following:

The length of the completed work may not be less than 5000 words of 35 typed 1.5 spaced paper. The top, bottom and right margins should be of 20 mm and the left margin of 40 mm.

The dissertation should be bound and handed over to should be bound and handed over to the Faculty on or before the stipulated date (which would be informed in due course.)

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