

1. FOREWORD

The Advanced Supplementary Level 'Mathematics and Statistics' is a new subject suggested by the working Group on Sixth Form Education which was formed in response to the recommendations made in the Education Commission Report No.2. The subject has been designed for students not planning to specialize in the physical sciences and engineering who nevertheless wish to further their studies in mathematics beyond the Certificate of Education Level and who might need this type of mathematics for subjects in areas such as the social sciences. The curriculum aims at breadth rather than depth with a view to widening students' perspective on mathematics. In view of this, students are not required to have previous knowledge of Additional Mathematics at the Certificate of Education Level. However, it is still intellectually demanding and coherent.

The teaching syllabus presented here has been prepared by the Mathematics Subject Committee (Sixth Form) of the Curriculum Development Council. It serves as a teaching guide which will lead to the Advanced Supplementary Level Mathematics and Statistics examination syllabus for 1994 and onwards issued by the HKEA. It does not pretend to provide a great new insight into what mathematics teachers should be trying to achieve. Rather it seeks to provide an indication on how and to what depth a certain topic should be treated through its suggested notes on teaching and time ratio.

The overall objectives of the syllabus are:

1. to develop students' mathematical and statistical knowledge in a manner which encourages confidence and give satisfaction, and
2. to extend students' mathematical and statistical skills for applications in everyday situations, and
3. to provide students with a tool for the study of some other subjects.

Having completed this course, students are expected to have acquired:

1. the understanding of the mathematical and statistical concepts, principles and methods, and the ability to apply them, and
2. the ability to formulate models and to identify and apply appropriate techniques for the solution of problems.

The syllabus contains very few items which are entirely new to the existing sixth form mathematics curriculum. Teachers who are familiar with the existing curriculum should find no difficulty in adopting this syllabus.