St. Rose of Lima's College
Computer Department

New Senior Secondary Curriculum
Information and Communication Technology

1. Introduction

The senior secondary Information and Communication Technology (ICT) curriculum provides students with knowledge, practical skills and an understanding of the processes involved in problem-solving using technology. It encompasses problem identification, solution and design, and the applications of ICT knowledge and skills in these processes.

The curriculum is organised into a Compulsory Part and an Elective Part. The Compulsory Part comprises a number of topics involving the fundamental principles in information and communication technologies and provides students with a solid foundation and broad area of study in ICT. The Compulsory Part consists of five modules, namely Information Processing, Computer System Fundamentals, Internet and Its Applications, Basic Programming Concepts and Social Implications.

Elective Part offers four options drawn from distinctive fields of computing and information science and their applications. Students are required to choose a specialised area for in-depth study. The options include Databases, Data Communications and Networking, Multimedia Production and Web Site Development and Software Development.

Students will be exposed to a variety of intellectual challenges involving problem-solving, communication and a range of associated practical skills and concepts. Studying this course will contribute significantly to the education of students by providing pathways into the workforce or preparing them for further studies in ICT-related fields. The course also provides opportunities for the development of key generic skills such as critical thinking, communication, creativity and problem-solving, in contexts that derive naturally from the learning objectives, outcomes and experiences.

2. Proposed Schedule of Topics

Year	Topics

Form 4 (SS4)	1. Information Processing
	   a. Introduction to Information Processing
	   b. Data Organisation and Data Control
	   c. Data Representation
	   d. The Use of Office Automation Software
	   e. Presentation of Information

	2. Computer System Fundamentals
	   a. Basic Machine Organisation
	   b. System Software
	   c. Computer Systems

	3. Internet and its Applications
	   a. The Networking and Internet Basics
	   b. Internet Services and Applications
	   c. Elementary Web Authoring

Form5 (SS5)	1. Multimedia Production and Web Site Development
	   a. Multimedia Production
	   b. Web Site Development

	2. Basic Programming Concepts
	   a. Problem-Solving Procedures
	   b. Algorithm Design
	   c. Algorithm Testing

Form 6 (SS6)	1. Social Implications
	   a. Equity of Access
	   b. Work and Health Issues
	   c. Intellectual Property
	   d. Threats and Security on the Internet

3. School-based assessment (SBA) schedule

In the SBA, students are required to complete a project. The context of the project is related to both the Compulsory Part and the Elective Part chosen by individual students. It is suggested that the project should be assessed on objectives and analysis, design and implementation, practical ICT skills, testing and evaluation, conclusion and discussion, documentation, creativity and project management.

During the process, students are actually acquiring the essential project skills for completing their ICT coursework assessment, which include problem-solving skills, time-management skills, documentation skills and presentation skills.

4. Public Assessment

Component			Weighting	Duration
Public examination	Paper 1 Compulsory Part		55%	2 hours
	Paper 2 Elective Part (choose one only)		25%	1 hour 30 minutes
	2A	*Databases elective*		
	2B	*Data Communications and Networking elective*		
	2C	*Multimedia Production and Web Site Development elective*		
	2D	*Software Development elective*		
School-based assessment			20%	

Note: Various kinds of items, including multiple-choice and structured data-response questions, will be used to assess students' performance in a broad range of skills and abilities. The questions require students' understanding of fundamental ICT knowledge and concepts.

5. Useful Links

- Senior Secondary Curriculum and Assessment Guides (Final version) – ICT
  http://www.edb.gov.hk/FileManager/EN/Content_5999/ict_final_e.pdf