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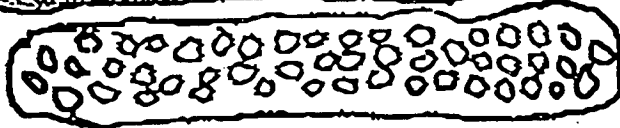
Curriculum Development Branch/Ministry of Education in cooperation with
Simon Fraser University is pleased to announce:

CS11/CS12 SUMMER INSTITUTES 1986

COMPUTER
STUDIES
11

The Computer Summer Institutes will familiarize computer educators in B.C. with the new CS11/CS12 courses and structured design using Pascal (Introductory and Advanced Problem Solving). The week long immersion format lends itself to concentrated learning in a single block of time. Leaders of the workshops have extensive experience in computer education.

COMPUTER
SCIENCE
12



SCHEDULE	Lower Mainland	Prince George	Kelowna area	Vancouver Island Victoria	Cranbrook Kimberley area	Quesnel
August 4 - 8	CS11/CS12 Orientation (Glen)				CS11/CS12 Orientation (Ted)	
August 11 - 15	Introductory Prob. Solv. (Ted)		Introductory Prob. Solv. (Rick)	Introductory Prob. Solv. (Glen)		
August 18 - 22	CS11/CS12 Orientation (Ted)	CS11/CS12 Orientation (Detlef)	CS11/CS12 Orientation (Mark)	CS11/CS12 Orientation (Glen)		
August 25 - 29	Advanced Prob. Solv. (Rick)					CS11/CS12 Orientation (Mark)
August 25 - 29	CS11/CS12 Orientation (Ted)					

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WORKSHOP OUTLINES

CS11/CS12 ORIENTATION



This is a workshop providing an overview of the Computer Studies 11 and Computer Science 12 course content—Scope and Sequence and Strands of each course will be compared. There will not be hands on computer work, but participants will examine teaching strategies, lesson outlines and resource materials. The non-programming components of CS11 and the Systems Analysis approach for CS12 will be examined and clarified.

INTRODUCTORY PROBLEM SOLVING (An Introduction to Structured Design Using Pascal)



This workshop will interest most computing teachers, particularly those implementing the new CS11 (and CS12) curriculum. Participants will gain familiarity with the various approaches to structured design included in this new curriculum. Assistance will be provided with solving problems typical of CS11 complexity level. The approaches to be taught (using Pascal) are widely accepted by computer scientists and data processing professionals.

It will be assumed that each participant meets these prerequisites:

1. Has taught CS11 or will be implementing the new ministry curriculum in 86/87.
2. Has experience in computer programming beyond the novice level — BASIC or other languages are acceptable. The workshop does not provide instruction in programming fundamentals.

The major goal of this hands-on workshop is to identify each participant's location on the continuum of skills necessary to teach CS11. There will be no attempt made to teach mastery of all of the topics presented during the workshop.

Workshop Topics include:

1. Introduction to problem definition, the logic of problem solving and top-down design.
2. Steps necessary to develop solutions to problems (including Structured English).
3. Structured programming using modular development and Pascal.
4. Introduction to Turbo Pascal.

Registration Deadline: June 27, 1986
(Ensure participation by registering early!)

NOTE: There is no registration fee. Participants and/or school districts, though, are responsible for their accommodation, travel and food expenses.

ADVANCED PROBLEM SOLVING (Advanced Structured Design Using Pascal)



This workshop will interest most computing teachers, particularly those involved with implementing the new Computer Science 12 curriculum. Participants will gain familiarity with the various approaches to structured design included in this new curriculum. Assistance will be provided with solving problems typical of CS12 level of complexity.

It will be assumed that each participant meets these prerequisites:

1. Has taught CS12 or will be implementing the new Ministry curriculum in 86/87.
2. Has some exposure to structured design, such as "Introductory Problem Solving" offered as part of this Summer Institute series, or other related experience.
3. Has enough Pascal experience so syntax will not confuse.
4. Has sufficient experience with editors to be able to use Turbo Pascal editor with minimal assistance.

The major goal of this hands-on workshop is to identify each participant's location on the continuum of skills necessary to teach CS12. There will be no attempt to teach mastery of all the topics below.

Workshop Topics include:

1. A review of the concepts of top-down design, modular development, and structured coding
2. Steps necessary to develop solutions to problems (including using Structured English).
3. Developing Structure Charts, Data Dictionaries, and IPO Charts.
4. The hierarchy of information representation: Record and File Design.
5. Designing by means of documentation.
6. Some structured debugging and testing strategies.
7. Projects involving binary searches, Shell sorts, and Indexed Files.
8. Using complex file designs (multiple indices, linked lists, etc.).
9. Managing the Team Project component of the CS 12 curriculum.

Complete and mail registration form to:



Jane Harper
Coordinator of Summer Computer Institutes
Faculty of Education
Simon Fraser University
Burnaby, B. C.
V5A 1S6
Phone: 291-4385

ABOUT THE INSTRUCTORS

Mark Ekelund:

Mark has taught CS11 and CS12 and served on the curriculum committees for both courses. He has experience with scientific programming in industry and as a teacher of computer courses for a community college. Mark has developed labs of MS-DOS computers in Quesnel district secondary schools and is presently writing the Structured Design section of the CS12 Resource Guide.

Ted McCain:

Ted has an extensive background in computing. Before entering the profession of education, Ted completed his B.A. in Computer Cartography and had several years computer-related business experience. For the past five years, he has been teaching CS 11, 12 and data processing in Maple Ridge. In addition, Ted sat on the Curriculum Committees for CS 11 and 12.

Glen Roger:

Glen has been involved with computers in education for seven years and as a teacher and Business Education Department head. He has worked on the CS12 curriculum committee, produced support materials for Turbo Pascal, and helped integrate computer use in other subject areas. He taught "Introduction to Pascal" in the 1985 Summer Institute.

Detlef Rudolph:

Detlef has been teaching Computer Studies for five years at Howe Sound Secondary School. He has been extensively involved in curriculum development, has designed locally developed CS10 and CS12 courses, and is a member of the CS11 revision committee. Detlef has worked with several programming languages and has done extensive professional development for Howe Sound teachers.

Rick Withers:

Rick has been the District Computer Helping Teacher in School District 42 (Maple Ridge - Pitt Meadows) for six years. He was a member of the Advisory Committee for the Computer Studies 11 curriculum revision and a member of the Computer Science 12 revision committee. Rick has offered various workshops around the province, including the 1985 Summer Institute.

CS11/CS12 SUMMER INSTITUTE REGISTRATION FORM

1. Workshop Request

Site _____ Workshop _____ Dates _____
Site _____ Workshop _____ Dates _____

2. Personal Data

Name _____ Home Ph. _____
Street _____ School Ph. _____
City _____ Postal Code _____
Summer Address _____
Summer Ph. _____ School District #() _____

3. Experience

Level of computer literacy: Elem. _____ Jr. Sec. _____ Sr. Sec. _____
Experience teaching: CS11 _____ new CS11 _____ Data Proc.11 _____ CS12 _____
Will teach in 86/87: CS11 _____ Data Proc.11 _____ new CS12 _____ CS12 _____
Experience with Pascal: none _____ little _____ moderate _____ much _____