

## Orientation Week

Orientation Week, Guelph's way of welcoming new students to the campus and introducing them to the people, services and facilities, begins September 4. Registration lines open September 5 and continue to September 7. Classes begin September 10.

Many newcomers will begin their week of discovery at the information tent located on Branion Plaza. With the guidance of some of the 100 people who are wearing ASK ME T-Shirts, the students will find their way to the President's house for a luncheon, attend information sessions, meet faculty members, participate in library orientation, ride the wagon tours around the campus and discover the residences. New acquaintances will be made at such social events as a corn roast, street dance, ice cream bash, coffee house, films, barbecues, tours of the Elora Research Stations and Elora Gorge, a bike rally and a sports afternoon. (Details of each day's activities are listed in "Next Week at Guelph" on the back page of this issue.)

### President's Luncheon

University President Donald F. Forster has invited each new student to an informal luncheon and gathering from 12:00 to 1:30 p.m. at his home which is located just north of Creelman Plaza. New students, with last names

beginning with the letters A through G are invited to attend the luncheon Monday, September 10; H through N, Tuesday, September 11 and O through Z, Wednesday, September 12.

### Meetings With Faculty

Hosted by the dean or director, academic programs meetings provide a chance for the student to get to know some of the key people in his or her College and academic department. It is also an opportunity to obtain information about academic regulations and procedures. These meetings, all to be held on Thursday, September 6, are as follows: OAC, 8:45 a.m., War Memorial Hall; FACS, 9 a.m., Peter Clark Hall, University Centre; CBS and CPS, 10 a.m., Room 105 and Room 113, Physical Sciences building; School of Human Biology, 10 a.m., Room 207, Human Kinetics building; Arts and CSS, 11 a.m., Peter Clark Hall, University Centre.

### Shinerama

Each year, students sponsor Shinerama, a shoe-shining campaign to raise money for cystic fibrosis. This year the Shinerama will be held Saturday, September 8 beginning at 10 a.m. Bring your shoes to the courtyard of the University Centre. □

## An exercise program for your mind

If you enjoy mental gymnastics, but want to avoid the strain of exams, the non-degree courses offered through the University School of Part-Time Studies and Continuing Education may well provide the solution. These carefully selected courses offer a great variety of ways in which to stretch the psyche.

By focussing on the past, some of the courses help to spotlight the present, notes Professor Jim Murray, associate director of the School. Inspired by the Tutankhamun exhibit in Toronto this autumn, the course, *The Culture of Egypt*, provides an understanding of the history, art, religion and language of this ancient civilization which was seminal to our own. The contributions to Western culture made by thinkers such as Plato, Descartes and Russell are explored in *Six Famous Philosophers*. The course, *Genealogy and Social History*, combines a practical introduction to tracking down your family tree with lectures on Canadian history from colonial times.

Many of the courses have been designed to help us cope with the urgent problems of the present, says Prof. Murray. A practical solar energy workshop will enable participants to build their own solar systems. This pragmatic approach is combined with discussions of the main controversies surrounding the energy problem in *Energy and the Way We Live*. In *Issues Behind the Headlines*, participants will be able to discuss and analyze the major events and issues communicated to us daily via the media with distinguished political scientist and journalist, Willson Woodside. *People Talking Back*, a follow-up to last winter's series, focusses on the referendum question and the Canadian economy.

Continued on page 2.



The collective agreement between the University of Guelph and Local 1334 of the Canadian Union of Public Employees was signed recently. Participating in the signing ceremony were, seated, from the left, Vice-President, Administration, Charles Ferguson; CUPE president, Ruth Maynard and President D. F. Forster. Standing, from the left, Director of Personnel, Roy Pella, and members of the CUPE negotiating team, Lloyd Morrison, Josephine Clark, Beuleh Stahlbaum and Jim Devlin.

### Inside this issue:

Turn the page for the *Institute of Computer Science* supplement, introducing non-credit courses on teaching and learning with computers as well as a guide to the people in and the services offered at ICS.

An exercise program *Continued from page 1.*

To broaden the threshold of our learning experiences, some of the courses combine the traditional classroom situation with new teaching formats. In *Outdoor Living Skills*, discussions on the equipment and skills required for day hiking, backpacking, canoe tripping and wilderness survival culminate in a day-long outing. Cooking, a shopping trip and a walking tour are a few of the course activities designed to encourage an intuitive feeling for *The Metric System in Practice*. Music buffs can enhance their appreciation of operatic or symphonic music in the concert hall and classroom with Guelph's Director of Music Professor Stanley Saunders.

"People take non-credit courses for both professional and personal reasons," says Prof. Murray, "and some of this autumn's offerings are useful in both spheres. *The Art of Negotiating* views almost every interpersonal contact, from discussing next year's vacation with your wife to bargaining with the boss for a raise, as a situation where ground can be either lost or won. Courses in time management and marketing can similarly serve a dual purpose.

Professional and personal needs may also attract people to *Brush Up Your Basic Writing Skills*, a course designed for those who wish to learn or review the basic elements of grammar and composition. An advanced writing course will follow in the winter semester. *Helping Adults Learn, Women in Management*, and a *Geographical Field Studies Workshop* are primarily intended for specialists, but other interested people are welcome.



**TWO PROFESSORS,** Frederick Vaughan, Political Studies, and Jaime Snell, History, have been awarded an \$18,000 grant by the Social Sciences and Humanities Research Council to undertake a major study of the Supreme Court of Canada. Research for the book will be conducted in Ottawa and in London, England.

**AN AUTUMN FLOWER WALK** has been planned at the Arboretum Saturday, September 8 beginning at 1 p.m. Naturalist Alan Watson will lead a 2-hour walk through the field and wooded areas to seek out the asters and goldenrods which abound in the fields and hedgerows. The University of Guelph Arboretum's Wednesday last evening excursion begins September 5 at 7 p.m. For more information on the many other educational programs offered by Arboretum telephone Ext. 3932.

**MEDICAL SERVICES** will be open on a 24-hour basis from Monday to Friday and from 8:30 a.m. to 4:30 p.m. on Saturday and Sunday effective September 4.

**THE ATHLETICS DEPARTMENT** will offer swimming lessons for children every Saturday from September 15 to November 17. Registration will be held Tuesday, September 11 at 7:30 p.m. in the Athletics Centre.

### Perennial Favourites

Perennial favorites include courses on literary classics, horticulture and the French and Spanish languages. The Applied Agriculture program in addition to its five specialized courses is again offering an introductory course designed to acquaint the beginner with all aspects of farming. Four of these specialized courses, beekeeping, fish farming, lamb and wool production, beef cow-calf and meat production, focus on types of farming. The fifth, *Farm Machinery* is an essential subject whatever your farming interests.

### Weekend Workshops

While most classes are held one evening during the week, weekend workshops are becoming increasingly popular. Wine-making, the agricultural history of Ontario and *Fighting Fair* are some of the subjects that can be covered in a leisurely Saturday on campus.

### Open to New Ideas

Ever open to experimentation in both subject matter and teaching formats, the School is interested in hearing from community groups for the purpose of designing new learning experiences. "If a group is sufficiently large, or the needs expressed are of common concern to others in the community, a course will be developed," says Prof. Murray.

For full information on all courses available, contact the University School of Part-Time Studies and Continuing Education, Johnston Hall, Ext. 3958. □

**PARENT AND PRE-SCHOOL** swimming lessons will be held on campus this fall. The classes will be held in the morning, twice weekly. Registration is Tuesday, September 11 at 7:30 p.m. in the Athletics Centre.

**INTERNATIONAL DANCE EVENINGS** will be held beginning September 11 at 8:30 p.m. in the Gryphon Room of Alumni Stadium. Telephone Ext. 8728 or 836-8453 for more information.

**THE GRYPHONS** will play three home football games, starting September 8 against Laurier at 2 p.m. The Gryphons will also be home Thursday, September 27 for a 7:30 p.m. game with Waterloo, and the annual Homecoming Game will take place Saturday, October 13 at 2 p.m. with McMaster the visiting team.

Other varsity sports and on-campus programs will also be getting under way shortly and more information is available through schedule cards and pamphlets at the Athletics Centre.

**TICKETS** for the Treasures of Tutankhamun exhibit at the Art Gallery of Ontario go on sale at the Curator of Art's office, Room 264 in the Arts building Monday September 17 from 2 p.m. to 4 p.m. and will continue daily during those hours until the block of 160 tickets is sold. For more information call the Office of the Curator of Art, Ext. 3158.



**THE UNIVERSITY CHOIR** will perform Handel's "Messiah" Sunday, December 2 at 8 p.m. in St. George's Church, Guelph. Rehearsals are at 7 p.m. on Wednesdays, beginning September 12 in Music Room 107 in the Arts building.

The Choir is open to members of the University community. New singers are requested to apply to choir director Gerald Neufeld, Ext. 3783 or 3127 for an interview. Tenors are especially welcome. Music will be provided for full-time students. Others are requested to buy the Watkins-Shaw edition (Novello). Copies are in the University bookstore.

Mr. Neufeld is also interested in hearing from singers who would like to be auditioned for the University Chamber Choir.

**THE CARDIO-VASCULAR CLUB** starts Wednesday, September 5 on the field. All 'new boys' must produce a current medical certificate to join. More information is available from Professor John Powell, Human Kinetics, Ext. 3155.



**Research Assistant**, Mathematics and Statistics. Salary \$150 per week. Applications together with resumes should be directed to Prof. John Holt, Mathematics and Statistics, University of Guelph, Guelph, Ontario. N1G 2W1.

For further information please see bulletin boards or call Ext. 3058 or 3059.

The University community was saddened by the sudden death of crop science professor John D. Banded August 14. He was 45.

Prof. Banded, who joined the Department of Crop Science at the OAC in 1960, made significant contributions to agriculture through his research on weed control by the use of herbicides, particularly in the corn crop and earlier in sugar beets. In recent years, much of his work dealt with the so-called "third generation problems" of weeds that resist the usual herbicides.

Prof. Banded represented Canada for several years on the board of the prestigious Weed Science Society of America. He was the immediate past president of the Canadian Pest Management Society and represented that Society on the Council of the Agricultural Institute of Canada. He was also active for many years on the Ontario Herbicide Committee and the Canada Weed Committee.

Prof. Banded is survived by his wife, Virginia, and three children, Barbara, Bradley and Janice and also by two sisters, Catherine of Guelph and Betty of London and one brother, Robert of Montreal. □

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Mrs. Anne Brodie, wife the late Professor Alexander H. Brodie, Department of English Language and Literature, and mother of Howard Andrew Brodie, died August 4 following a lengthy illness. Mrs. Brodie was 60.

In memory of Mrs. Brodie, a donation may be made to the Heart Foundation or to the Professor Alexander Brodie Memorial Fund, Department of Alumni Affairs and Development, level 4, University Centre.

# INSTITUTE OF COMPUTER SCIENCE

## SUPPLEMENT

### The Computer Services Council

In August, 1977, the President's Advisory Committee on Computing recommended that a Computer Services Council be formed to consider and to recommend policies for computing at the University of Guelph. The Computer Services Council, made up of representatives of the administrative, academic and student areas, would provide a forum where the groups could air their opinions, discuss ideas and plan the future of computing services.

One goal would be common to all: to provide easily accessible computing services. This goal would be applied to the needs of the two major areas of the University — the academic and administrative departments. According to the Council's *Terms of Reference and Objectives* document, the computer is for the academic community "a major resource whose scope and importance are such as to be considered as essential to the teaching and research functions of the University." For the University Administration, computing services provide "a powerful tool for improving the effectiveness and quality of current University operation, management, planning and evaluation in ways that give increased attention to individual needs without degradation of individual privacy." The Computer Services Council faces the large and challenging task of balancing the needs of these two important areas.

The composition of the CSC ensures that students, academics and administrators have a voice in computing policies. Vice-President, Academic, Professor Howard C. Clark, and the Vice-President, Administration, Charles C. Ferguson, attend council meetings. Prof. Clark, to whom the council reports, is also responsible for communicating any CSC decisions to

the University. Professor John Ogilvie, Director of the School of Engineering, chairs the meetings and joins Professor Richard Carlton, Sociology and Anthropology, as an academic representative. The secretary of the Council is Walter Vaughan. Neil Sullivan, Comptroller, is a representative for the Administration. The Library's voice and administrative representative at CSC meetings is Amy Porter. Stan Foremski, president of the Computer Science Club, is the students' representative. The two departments most affected by computing policies are represented by Professor James Linders, chairman of the Department of Computing and Information Science, and Dr. Richard Mason, Director of the Institute of Computer Science. This cross-section of campus computer users ensures that all groups will have an opportunity to shape the future of computing services.

At present the Institute of Computer Science has been directed by the CSC to study ways and means of developing a communications network. This will make it possible to link terminals wherever they are desired across campus.

Terminal usage is expected to grow rapidly in the next few years and the distribution and placement of terminals has been discussed extensively by the Council. The greatest accessibility could be achieved by placing terminals in small clusters throughout the University's buildings and perhaps in student residences. In this manner, the primary goal is fulfilled, but security and technical counselling could become problems. Conversely, terminals in a large central pool are more secure, but less convenient for users.

To assist with the teaching function of the University, the CSC recently approved in principle the purchase of a stand-alone computer to handle 60 terminals. This machine will be used interactively for instructional programming needs on campus.

As time passes, more and more microcomputers are expected to appear on campus. Should departments wish to purchase small computers costing over \$5,000, approval must be sought from the CSC. This restriction allows the University to acquire new computing equipment in an orderly manner and gives the Institute of Computer Science, when required, time to consult with the department to determine if the purchase will be compatible with the Amdahl computer.

In June, 1978, the CSC approved a special computing program under which some of the facilities of the Amdahl computer may be made available free to researchers who require a large amount of computer power, but do not have grants or funds. This change permits people involved in research to use time on the central processing unit on a standby basis for very large and complex computations. Charges are still



levied for printing the results and for the time connected to the computer.

Administrative departments are more and more frequently using computer services for speedy entry and retrieval of information. As the financial restraints upon the University increase, the Administration is hoping to broaden productivity through greater use of computer technology. One example of a new administrative use of computers is the Student Accounts Receivable System (STARS). This system was requested by the Bursar's Office to assist them in maintaining records of financial transactions between the University and the students. The first phase of STARS is expected to be in operation early in 1980.

Deciding upon the future is a difficult task, especially in a field that has seen phenomenal technical advances. The planning and policies of today will make computers a commonplace tool in a few short years. However, the future everyone hopes for does not just happen; it must be carefully constructed. Under the guidance of the CSC, computing services at Guelph should grow in a manner that will fulfil campus needs and see this University through the uncertain times ahead. □

### The computer lab

'What do you do when you get this type of error message ... ?'

"You won't believe this, but I ran this job yesterday and there were no problems. Today it doesn't run and I never changed a thing!"

"How do you retrieve your data sets from the archive?"

These questions and many more fill the day of computer lab staff at the Institute of Computer Science. From the moment the computer begins to hum in the morning until the last calculation at night, computer lab staff are busy counselling students, faculty members and staff. Questions arrive by telephone, on-line query messages sent by users, and in person. The majority of questions come from the students, faculty members and staff who use the many terminals and keypunch machines located in the computer lab.

As a centre of technical counselling and advice the lab is ready and able to assist you. If they are unable to solve your technical problem, they will consult with other resource people or refer you to a service manager. However, the actual programming and checking of source codes must remain the user's responsibility.

Technical counselling is available from 8:30 a.m. until 2:00 a.m. and professional help obtainable until 6:30 p.m. All evening counselling is done by student assistants. They will be able to answer many questions, but occasionally the problem may reach beyond the limits of their experience.

The computer lab is located in Room 114 of the Institute of Computer Science building, Ext. 3284. □

### Now, that's fast!

In the computer, basic operations can be done within the order of a NANOSECOND (one thousandth of a millionth of a second). In the time that it takes a cup of coffee to fall from a desk to the floor (half a second) a fairly large computer could, given the information in magnetic form, do the following:

Debit 2,000 cheques to 300 different bank accounts,

and examine the electrocardiograms of 100 patients and alert a physician to possible trouble,

and score 150,000 answers on 3,000 examinations and evaluate the effectiveness of the questions,

and figure the payroll for a company with a thousand employees,

and a few other chores. □



Members of the Computer Lab staff, Roman Junyk, left, and Peter Jaspers-Fayer.



# Non-credit Course Descriptions

## General Courses

Meanwhile, back in the office, the graduate student is bent over a dog-eared sheet of handwritten calculations. Down the hall, the departmental secretary begins the tedious task of retyping the edited version of the revised edition of a research paper. If this is happening in your department, the Institute of Computer Science invites you to find out what the computer can do for you.

For more than a decade, faculty, staff and graduate students have taken part in the short non-credit courses offered free by the Institute of Computer Science. These courses are designed to give participants some basic computing skills which they can put to use immediately. If you are new to computing, the courses can teach you how to use programs already stored in the computer. Programs to assist with the production of large documents and the compiling of statistics are easy to learn and can save you time. Other courses will teach you the fundamentals of computer programming. Experienced users will find these courses useful for increasing their knowledge and skill. (Credit courses in computing science can be taken with the Department of Computing and Information Science. Telephone Ext. 2258 for details.)

To receive the full benefit of any course taken, students are urged to complete exercises assigned by the instructor.

Why not try computing this fall? If you are interested in taking any of the courses described below, call Liz Reemeyer, Ext. 3046.

## General Courses

### INTRODUCTION TO SCRIPT

Course 1: Sept. 24, 26, Oct. 1, 3; 09:00 - 12:00  
Course 2: Oct. 22, 24, 29, 31; 18:00 - 21:00

This course will assist those people on campus who are involved in typing reports, research papers and theses.

The word-processing facilities available on the University of Guelph computer allow users to enter, store, modify and print textual material according to a specified format. The user with no knowledge of computing can add, delete or insert characters, words or lines in the text stored in the computer and make many other editorial changes. Considerable savings can be realized in time spent on retyping and proof-reading.

Topics to be discussed will include creating and deleting text files, entering and modifying textual material and specifying printing and formatting options.

Prerequisite: None.

### COMPUTING — WHERE DO I START?

Sept. 17; 18:30 - 21:00

This course is recommended for those who are planning to use the University's computing facilities for the first time. This course will provide an overview of:

- computing facilities and services
- language processor supported
- program library
- non-credit course program
- charging for computer services.

Discussions will centre around applicability of various computing tools for appropriate application areas.

### TEST SCORING SYSTEM

Oct. 2; 13:00 - 16:00

This course is for faculty who want to use the computer to score multiple choice examinations and tests.

Topics to be discussed are the facilities and limitations of the Test Scoring System, coding of student name and answer cards, preparation of Job Control cards, job submission, error correction and description of reports printed, as well as privacy and security measures.

The course content will be presented in sufficient detail to enable use of the system whether or not the faculty member has had prior computing experience. The design of multiple choice questions will not be covered.

Prerequisite: None.

### MARKS RECORD-KEEPING SYSTEM

Course 1: Sept. 28; 13:00 - 16:00  
Course 2: Oct. 10; 18:30 - 21:30

MARKS is an interactive APL program intended for use by faculty to record student assignment marks over a semester and to calculate student percentages.

It allows up to 15 assignment marks to be entered and provides reports by class or by section. Assignments may be weighted, and overall student percentages are calculated using the weighting factors specified. Class and section mean and standard deviation are given, along with various other statistics.

Knowledge of APL would be helpful, but not essential. The MARKS system will be presented in sufficient detail to enable its use by faculty without prior computing experience.

Prerequisite: None.

### INTRODUCTION TO SAS

Oct. 16, 23, 30; 13:00 - 16:00

SAS (Statistical Analysis System) is a comprehensive package of computer programs for data analysis. It offers a wide range of statistical procedures (especially in the analysis of designed experiments), extensive data management tools (reads data in almost any format, updates, sorts and merges files), and report-writing features.

The course is designed to provide the student enough exposure to SAS in order to use it. It is divided into three sessions as follows:

- Session I - Creating SAS Data Sets
- Session II - Analyzing SAS Data Sets
- Session III - Use of SAS Program Statements.

The student is expected to submit exercises using his/her own data or using a common dataset to be provided in class.

Prerequisite: A basic knowledge of statistics and Introduction to CMS, Module 1.

### INTRODUCTION TO MICROCOMPUTERS

Nov. 12, 15, 19, 22; 13:00 - 16:00

This course has been designed as a brief introduction for those who have little or no knowledge of the world of small computer systems. Hardware components, operating systems, the programming language BASIC, uses and limitations of microcomputers will be among the topics discussed. At least one microcomputer will be available for use by course participants.

One assignment will be issued to give you experience creating a simple program using the BASIC language. Upon completion of the course, you should have a clear picture of how to use a microcomputer for problem solving.

Prerequisite: None.

### PLOTTING TECHNIQUES

Sept. 19; 13:00 - 16:00

This seminar is for people who would like to display their data in the form of plots.

Demonstrations of the various plotting facilities will be given and course participants will receive a manual on plotting techniques.

If you plan to attend, bring along your plotting questions and problems for discussion at the seminar.

## Final semester courses: APL

### INTRODUCTION TO SHARP APL

Course 1: Sept. 18, 20, 25, 27, Oct. 2, 4; 17:00 - 20:00  
Course 2: Sept. 18, 25, Oct. 2, 9, 16, 23; 19:00 - 22:00  
Course 3: Sept. 20, 27, Oct. 4, 11, 18, 25; 19:00 - 22:00  
Course 4: Oct. 9, 11, 16, 18, 23, 25; 17:00 - 20:00

This course is a comprehensive study of one of the most concise, consistent and powerful programming languages currently available.

The course is designed to be modular in nature so that a student with some previous knowledge of APL may take only those sections in which help is needed. Those unfamiliar with the APL language should take the entire course as a contiguous whole. Each section builds on the material covered in the previous section.

The topics to be discussed include:

- 1) Lecture 1  
—Rudiments of the APL language.
- 2) Lecture 2  
—Management of APL workspaces.  
—Using the APL public library.
- 3) Lecture 3  
—More of the APL language (with emphasis on handling of matrices).
- 4) Lectures 4 and 5  
—Writing APL programs.



## 5) Lecture 6

—Using the APL FILE system.

At the end of the course, the student will be able to use APL in calculator mode, enter and manipulate data, use and manage stored workspaces and write and modify APL programs.

Assignments which provide practice on the APL system will be given, and it is recommended that students write an APL program to be discussed in the final lecture. The recommended text (though not required) is APL — AN INTERACTIVE APPROACH by Gilman and Rose.

Prerequisite: None.

## APL JAM SESSIONS

Oct. 31, Nov. 28; 14:00 - 16:00

With the number of experienced AP L'ers increasing and with the many new features now available in Sharp APL, there is a large amount of information that should be traded to broaden everyone's APL horizons. To stimulate the sharing and exchange of ideas on a regular basis, the Institute of Computer Science is offering a monthly session to which all interested APL users are invited. Thirty-minute presentations by Institute staff, University faculty members and invited speakers on a variety of APL subjects will start each session. This will be followed by open discussions and questions from attendees. Topics for each session will be announced in "1 NEWS" in the APL system.

Prerequisite: Basic knowledge of APL.

## INTRODUCTION TO CMS

Course 1: Sept. 24, 26, Oct. 1, 3, 5; 13:00 - 16:00

Course 2: Oct. 15, 17, 19, 22, 24; 13:00 - 16:00

Course 3: Nov. 5, 7, 9, 12, 14; 18:00 - 21:00

CMS (Conversational Monitor System) provides an interactive facility for creating files, executing computer programs and submitting jobs to the batch facility.

The first module discusses the basic concepts of CMS. It is a prerequisite to each one of the remaining three modules which are independent of one another.

This course is divided into four modules, i.e.:

- 1) — CMS Editor; Disk Concepts; Use of the Reader, Printer, Punch (two sessions). No prerequisite.
- 2) — Compiler (one session). Prerequisite: FORTRAN or WATFIV.
- 3) — SPSS (one session). Prerequisite: Basic knowledge of SPSS.
- 4) — SAS (one session). Prerequisite: Basic knowledge of SAS.

## INTERMEDIATE CMS

Course 1: Sept. 24, 26; 18:00 - 21:00

Course 2: Oct. 15, 17; 18:00 - 21:00

This course will cover programming techniques and the use of Exec files under the Conversational Monitor System (CMS).

If you plan to attend, please bring your questions and problems with CMS to class.

Prerequisite: Introduction to CMS.

## Language courses

### INTRODUCTION TO COMPUTER SIMULATION

Sept. 27, Oct. 4, 11, 18; 13:00 - 15:00

This course is designed for people with no previous knowledge of programming or simulation who want to learn about this particular computer application.

Simulation languages such as CSMP, GPSS, GASP and DYNAMO, allow a user to build a model on which he may conduct "experiments" to gain an understanding of the behavior of the real system being simulated. The course will include an overview of computer simulation and its application to various disciplines. There will be a discussion of the available simulation languages and some of the features of each.

At the end of the course, students will have a better appreciation of the use of computers in systems simulation.

Prerequisite: None.

### INTRODUCTION TO SPSS

Course 1: Oct. 9, 12; 13:00 - 16:00

Course 2: Oct. 29, Nov. 2; 13:00 - 16:00

SPSS (Statistical Package for the Social Sciences) is a package of computer programs for data manipulation and statistical analysis. It is designed for the social sciences.

The course is designed to introduce the user to SPSS and guide him/her through the SPSS self-teaching modules. It is divided into three sessions:

Session 1 — Overview of SPSS

Introduction to SPSS Self-teaching Modules

Session 2 — Questions and Answers

Session 3 — Questions and Answers

The student is expected to work through the SPSS self-teaching modules and submit exercises using his/her own data or using a common dataset to be provided in class.

Prerequisite: A basic knowledge of statistics and Introduction to CMS, Module 1.

### PLI1 DEBUGGING TECHNIQUES

Oct. 26; 13:00 - 16:00

This seminar is for those people who wish to save time when debugging PLI1 programs. Various techniques for doing on-line program debugging in CMS will be discussed. Special emphasis will be placed on the use of both the PLI1 Checkout and the PLI1 Optimizing compilers.

Prerequisite: A knowledge of CMS and PLI1.

## General Courses

### NEED HELP? USE SOS

Consultation services from ICS have been available through two media in the past — in person and on the

telephone. With an increasing number of people using our time-sharing services (APL, CMS, TSO), we have now established a facility by which users can receive consulting help right at their terminal. Help is acquired by sending messages to a consultant who is also working at a terminal. This service has been appropriately entitled SOS — System On-line Support.

Information on using this service may be obtained from the Computer Lab, Room 114, ICS, Ext. 3284. A detailed description may also be found in Technical Note #194.

## Instructional Staff

Staff 01the Institute Of Computer Science part1ci-p312 1n the 2r21n1n9 program a5 1n52ruc10r51 Whenever necessary, computer professionals from 0u251d8 the University 0r from other departments mmay 62 used 85 lecturers.

## Seminars

In addition to the scheduled courses being offered by ICS, a number of general interest seminars are held from time to time.

Details on the content and scope of these seminars are announced in the University *News Bulletin* and in notices which are sent to University departments.

## Unscheduled courses

Not 8all available courses 8r2 offered 2h15 semester. Unscheduled courses include:

- What 15 a Computer?  
Cluster Analysis (CLU37AN)
- Introduction to MARK IV

ICS 15 prepared 10 make special arrangements to give any scheduled 0r unscheduled courses to interested groups 0r departments.

## Registration

To register for any of the courses or to obtain further information, please telephone the Manuals Clerk, Ext. 3046.

## Signing on to computer simplified

A simplified sign-on procedure will be in effect in the Amdahl computer, Monday, September 10. The new procedure has been tested by the Institute of Computer Science staff and will be available for testing by campus computer users on Sunday, September 9.

For more detailed information on the sign-on procedure, visit the Computer Lab, Room 119, ICS, or call Ext. 3284. □

# Service managers

After talking with the technical counsellor in the Computer Lab, Ron really felt the problem was bigger than a technical detail. The technical counsellor suggested that he talk over his problem with a service manager. Ron had read somewhere that service managers were responsible for the activities and quality of the services being offered by the Institute of Computer Science. As he bounded up the stairs to the second floor of the Institute, Ron decided that his problems may be shared by others and bringing it to the attention of a service manager was exactly the right step.

Service managers function as focal points for discussion and planning of particular services. The day-to-day delivery of service is their major concern. After listening to users' problems, comments and requirements, the service manager may deem it necessary to make changes to the service. As a manager, he is also charged with the responsibility of keeping abreast of computing trends in his service. A new feature may appear on the market and if the service manager sees a chance of improving the quality of computing at Guelph, he may recommend that it be installed on campus. The service manager has the authority to negotiate and co-ordinate the implementation of the new feature.

If you have any comments or suggestions, you may contact any of the following service managers.

SERVICE	SERVICE MANAGER	EXTENSION
Hardware Hardware acquisition, terminal maintenance, mainframe operations, tape and disk monitoring, management of hardware, data entry, communications system, terminals	W. Riggs	3775
Computer Systems Operating system, computer system research and monitoring	L. Parsneau	3281
Compilers FORTRAN, PLI1, COBOL, ASSEMBLER, SJS (including libraries)	S. Swaminathan	3712
Application Libraries Scientific library, graphics, data library, simulation	N. Ison	3712
Computer Lab Technical counselling, utilities paper tape, tour co-ordination	P. McMullen	3284
Training and Publicity Training, publicity, publications	A. Sheth	3712
APL Conversational Monitor System (CMS)	B. Stahlbaum M. Wilson	2706 3281
Word Processing	L. Dennis	2265
Small Systems Microcomputers, minicomputers and peripherals	L. Parsneau	3281
Data Processing TSO, OSIMVT (Batch processing MARK IV, Librarian, TOTAL, ENV I RONI1, T-ASK)	L. Voisin	3065

## Non-credit courses

Courses	Dates	Time	Instructor
Computing - Where Do I Start?	Sept. 17	18:30 - 21:00	A. Sheth
Introduction to Sharp APL (6 lectures given 4 times)	Sept. 18, 20, 25, 27, Oct. 2, 4 Sept. 18, 25, Oct. 2, 9, 16, 23 Sept. 20, 27, Oct. 4, 11, 18, 25 Oct. 9, 11, 16, 18, 23, 25	17:00 - 20:00 19:00 - 22:00 19:00 - 22:00 17:00 - 20:00	B. Stahlbaum G. Wade G. Wade L. Dunn
Plotting Techniques	Sept. 19	13:00 - 16:00	P. McMullen
Introduction to SCRIPT (4 lectures given twice)	Sept. 24, 26, Oct. 1, 3 Oct. 22, 24, 29, 31	09:00 - 12:00 18:00 - 21:00	L. Dennis L. Dennis
Introduction to CMS (5 lectures given 3 times)	Sept. 24, 26, Oct. 1, 3, 5 Oct. 15, 17, 19, 22, 24 Nov. 5, 7, 9, 12, 14	13:00 - 16:00 13:00 - 16:00 18:00 - 21:00	N. Ison P. Jaspers-Fayer W. Davidson
Intermediate CMS (2 lectures given twice)	Sept. 24, 26 Oct. 15, 17	18:00 - 21:00 18:00 - 21:00	W. Davidson W. Davidson
Introduction to Computer Simulation (4 lectures given once)	Sept. 27, Oct. 4, 11, 18	13:00 - 15:00	S. Wang
MARKS Record-keeping System (1 lecture given twice)	Sept. 28 Oct. 10	13:00 - 16:00 18:30 - 21:30	J. Miller J. Miller
Test Scoring System (1 lecture)	Oct. 2	13:00 - 16:00	J. Miller
Introduction to SPSS (2 lectures given twice)	Oct. 9, 12 Oct. 29, Nov. 2	13:00 - 16:00 13:00 - 16:00	N. Ison N. Ison
Introduction to SAS (3 lectures given once)	Oct. 16, 23, 30	13:00 - 16:00	N. Ison
PLI1 Debugging Techniques (1 lecture)	Oct. 26	13:00 - 16:00	W. Davidson
APL Jam Session (2 sessions)	Oct. 31, Nov. 28	14:00 - 16:00	B. Stahlbaum
Introduction to Microcomputers (4 lectures given once)	Nov. 12, 15, 19, 22	13:00 - 16:00	P. McMullen

# Community Service Award winners

Animal and Poultry Science professor, Robert P. Forshaw and Bruce MacMillan, former vice-president, education, of the Central Student Association were presented with the first University Community Service Awards by President D.F. Forster at the community barbecue July 18.

Prof. Forshaw came to Guelph as associate professor in the then Animal Science Department in 1947. He quickly established a reputation for his dedication to teaching, research and to the well-being of his students. Between 1953 and 1976 this concern was manifested through his work as chairman of the University of Guelph Student Health Insurance Advisory Committee, which resulted in students' being able to obtain excellent health coverage at reasonable cost, and through his efforts to foster the Wellington Co-op Medical Association and the co-operative movement in general for the benefit of all participants.

Prof. Forshaw has served on the University Senate since its inception and has also made contributions through his work as chairman of the fringe benefits committee of

the University of Guelph Faculty Association. More recently, he was a major force in forming and participating in a group which, in conjunction with the University, negotiated successfully with the provincial government a more equitable pension treatment for faculty and staff members who had previously been under the provincial civil service.

As an undergraduate, Bruce MacMillan proposed and co-ordinated arrangements for the first community barbecue five years ago. A few years earlier, with Marlene Hoff, he founded the Fine Art Course Union, a group which, through discussions with faculty, brought about a curriculum less heavily weighted towards art history.

Mr. MacMillan also served on the University Senate and, through his involvement with the University Centre Board, worked for the attainment of student parity on that Board and the Board's autonomy from the University's Board of Governors. He also contributed, with Gayle Annis, to the formation of the University of Guelph Women's Caucus and later co-ordinated the first women's conference of the Ontario Federation of Students. □

## Record attendance at Summer Campus

A record 860 people attended Summer Campus in July. Professor Jim Murray, associate director of the University School of Part-Time Studies and Continuing Education, who established the learning vacation for children and adults in 1976, notes that during the first three summers the program averaged about 500 participants.

Another surprising figure is that this year 75 per cent of the adult registrants came from beyond Guelph and area. "In the past, Guelph registrations and out-of-town registrations have been about equal," says Prof. Murray. "This year," he adds, "people also came from farther afield, from British Columbia and Iowa, as well as from Quebec, Michigan and New York State."

Prof. Murray cites a variety of reasons for this success. Since the program is now well established, people are returning for a second and third time and they sometimes bring their friends. Some of the adult courses offered this year, such as freelance writing, solar energy, television production, "Games People Play" and apiculture proved to be extremely popular. The youth portion of Summer Campus had such wide appeal that all the places were taken weeks before the program began, he says. □

# Huntsman marks 10th anniversary

The Huntsman Marine Laboratories marked the 10th anniversary of its official opening in August. The University of Guelph notes the anniversary because its involvement with the St. Andrews, New Brunswick, station goes back much farther than that.

The events which ultimately led up to the consortium began at Guelph at the first meeting of the Ontario Committee of Heads of Biology when John Anderson, newly-appointed director of the federally operated St. Andrews Biological Station, suggested that the station be opened to universities for teaching purposes.

Professor Keith Ronald, then chairman of the Department of Zoology and new Dean of the College of Biological Science, was chairman at that meeting and recalls the tumultuous debate which followed. Universities did not want to be treated as second-class citizens, relying on government agencies to set course outlines and study programs, he remembers. The discussion, however, accomplished one thing. It made the members realize that collectively they could achieve many advantages which, individually, they could not afford. A sub-committee, encompassing universities from Manitoba to the east coast was struck and its aim was a common facility for marine science.

The honorary secretary for the consortium was Charles Ferguson, now Guelph's Vice-President, Administration, and Prof. Ronald gives credit to Mr. Ferguson's administrative expertise. Without it, he says, the entire project might well have gone down the drain.

With much hard work and the support of some influential friends, meetings were arranged at St. Andrews. Before long the whole town became involved. The New Brunswick government made an offer of land adjacent to the federal biological station and a house which became a 60-bed residence. The first boat was purchased by Prof. Ronald's grant and was subsequently turned over to the consortium. The National Research Council was approached — possibly for the first time for an ongoing project — for funding. Twelve universities and federal and provincial governmental agencies became the initial 22 members, and this has now softened to 20 active and very solid members. Today, Huntsman Marine Laboratories can boast of its own aquarium, its own museum and its own laboratories. The greatest achievement, however, says Prof. Ronald, is that after 10 years 10 universities are talking to each other and accepting each other's standards.

Each university, as well as the Huntsman Marine Laboratories itself, runs courses, but the facilities are shared. Some 400 to 500 students from Guelph have taken part in the various programs and the summer course is now recognized as part of a full credit course in marine biology at Guelph. One of the advantages for students is the free exchange of information with federal scientists on the site.

If the program continues as it has there is no reason why it should not attain international recognition on a par with the Wood's Hole Institute at Massachusetts, believes Prof. Ronald. □

**Next Week at Guelph** *Continued from page 8.*

## TUESDAY, 79 09 11

Counselling and Student Resource Centre — STUDY SKILLS WORKSHOPS begin; register at the Connection Desk, level 3, UC. RESUME WRITING CLINIC, every Tuesday, 18:00. No need to register, just drop by the Counselling and Student Resource Centre, level 3, UC.

University of Guelph Faculty Association — EXECUTIVE MEETING, 12:00, Board Room, Faculty Club, level 5, UC.

Orientation Week — PRESIDENT'S LUNCHEON, for new students with last names beginning with the letters H through N, 12:00 to 13:30, President's house; EVERYTHING YOU WANTED TO KNOW ABOUT FACULTY BUT WERE AFRAID TO ASK, 19:00, South Residences; ENTERTAINMENT, featuring "Segarinni", 20:00, PCH.

Informal Discussion — BAHAI' CAMPUS CLUB, 17:00, UC 334.

## WEDNESDAY, 79 09 12

Easy Wednesday — VIDEO TAPE PROGRAM, 11:00 to 15:00, UC 103; LUNCHEON SPECIAL, 11:30 to 14:30, PCH.

Orientation Week — STUDENT CLUB DISPLAYS, 10:00 to 16:00, UC courtyard; PRESIDENT'S LUNCHEON, for new students whose last names start with the letters O through Z, 12:00 to 13:30, President's house; EVERYTHING YOU WANTED TO KNOW ABOUT FACULTY BUT WERE AFRAID TO ASK, 19:00, East Residences; ENTERTAINMENT: TBA, 20:00, PCH.

Dance Club — INTERNATIONAL DANCE CLUB, English, Israeli, Greek, Bulgarian, Swedish, ballroom, your choice, 20:30 every Wednesday, Gryphon Room (upstairs in the Alumni Stadium). Call Ext. 8728 or 836-8453 for more information.

# Next Week at Guelph

TUESDAY, 79 09 04

D.V.M. Program - Classes commence

Exhibit - INTERNATIONAL YEAR OF THE CHILD PHOTOGRAPHY EXHIBITION, contemporary photographs of children selected by Lorraine Monk, main floor, McLaughlin Library until 79 09 10.

Part-time Studies Information - DISPLAY OF COURSES available through School of Part-time Studies and Continuing Education, Stone Road Mall until 79 09 10.

Orientation Week - DEPARTMENTAL DISPLAYS, administrative departments will have displays describing services they provide to students, UC courtyard, daily until 79 09 06; RESIDENCES OPEN, 09:00; WAGON TOURS, 10:00 to 16:00, Branion Plaza; PARENT ORIENTATION, 13:30 to 15:00, Faculty Club, level 5, UC; RESIDENCE MEETINGS (times vary from 17:30 to 21 :00; consult agenda); NEW STUDENT INFORMATION MEETING, North Residence area students or off-campus students with North Residence honorary membership, 19:00; South or East Residence area students or off-campus students with East or South Residence honorary membership, 21:00, WMH; LENNOX ADDINGTON U-F INDEEM, 21:00, Fireplace lge.; EAST RESIDENCE DANCE, 22:00, main lge. Informal Discussion - BAHA'I CAMPUS CLUB, 17:00, UC 334.

WEDNESDAY, 79 09 05

Registration

Office for **Educational Practice Workshop** - MAKING YOUR OWN OVERHEAD TRANSPARENCIES, basic principles will be discussed and demonstrated; participants will make and use several overheads in a presentation. For further information call Ext. 3522.

Orientation Week - NEW STUDENT REGISTRATION, 08:30 to 17:15, Athletic Centre; WAGON TOURS, 10:00 to 16:00, Branion Plaza; MAIDS HALL MEETING AND ICE CREAM BASH, 17:30; EAST RESIDENCE CORN ROAST AND MOVIES, 18:00; LAMBTON HALL MEETING, CORN ROAST AND STREET DANCE, 19:00; LENNOX ADDINGTON RESIDENCE HOT DOG AND CORN ROAST DANCE, 20:00; SOUTH RESIDENCES COFFEE HOUSE, 20:00, Prairie Cafeteria; ENTERTAINMENT: TBA, sponsored by the Central Student Association, 20:00, PCH.

Arboretum Series - WEDNESDAY EVENING EXCURSION, with Alan Watson, naturalist, 19:00, meeting at the J.C. Taylor Nature Centre. This evening's topic: Autumn Fields.

Information Night - EVENING AND WEEKEND CREDIT COURSE INFORMATION NIGHT, 19:30, Faculty Club, level 5, UC. University representatives will answer questions.

THURSDAY, 79 09 06

Registration

Office for Educational Practice **Workshops** - STUDY SKILLS FAMILIARIZATION, introduces faculty to the Study Skills program; participants will learn to recognize problems of listening, note taking, time management and exam writing and see how the program helps students learn effective study techniques. LECTURE WORKSHOP, will give participants opportunity to practise and receive feedback on their lecturing skills. For further information call Ext. 3522.

**Orientation Week** - SOUTH RESIDENCES FITNESS AND HEALTH BREAKFAST, 08:00, Prairie Quad; ACADEMIC PROGRAM MEETINGS: ONTARIO AGRICULTURAL COLLEGE, 08:45, WMH; COLLEGE OF FAMILY AND CONSUMER STUDIES, 09:00, PCH; COLLEGES OF BIOLOGICAL SCIENCE AND PHYSICAL SCIENCE, 10:00, Phys. Sc. 105 and 113; SCHOOL OF HUMAN BIOLOGY, 10:00, Human Kinetics 207; COLLEGES OF ARTS AND SOCIAL SCIENCE, 11:00, PCH; AGGIE BARBECUE, 12:00, Bullring Patio; WAGON TOURS, 12:00 to 16:00, Branion Plaza; INTERNATIONAL STUDENTS MEETING, 13:30 to 16:30, UC 103; 'LEVEN LITRE LARD, team effort, prizes and fun,

14:00, Alumni Stadium; MACDONALD AND MILLS HALLS BARBECUE, 17:30, Creelman Plaza; MATURE STUDENT MEETING, 19:00 to 21:00, Faculty Club, level 5, UC; STREET DANCE, 20:30, Creelman Plaza; AGGIE DANCE, 20:00 Bullring.

TV - SPOTLIGHT ON UNIVERSITY OF GUELPH, Experience '79, 19:00, Cable 8.

FRIDAY, 79 09 07

Registration

Orientation Week - ELORA RESEARCH STATION TOUR, 12:00 to 16:30, bus leaves from UC south entrance; SOUTH RESIDENCE SPORTS AFTERNOON, 13:00, South Residence field; LAMBTON SPORTS AFTERNOON, 14:00, Lambton courtyard; JOHNSTON BASEBALL, 14:00, EAST RESIDENCE RECREATIONAL SWIM, 14:00, Athletic Centre; SOUTH RESIDENCES BARBECUE, 17:00, Prairie Quad; ENTERTAINMENT featuring "Battered Wives", 20:00, PCH; LENNOX ADDINGTON HORROR SHOW, 22:00, platform tennis courts behind Lambton.

Worship - FACULTY-GRADUATE CHRISTIAN FELLOWSHIP, 12:00 to 13:00, UC 333; MUSLIM JUMA PRAYERS, 12:30, Chapel, level 5, UC.

Office for Educational Practice Demonstration - DEMONSTRATION OF LARGE CLASSROOM FACILITIES, 14:00 to 16:00, Arts 117A; during two-part session facilities in new Arts building lecture hall will be shown and tours arranged to other lecture rooms of particular interest to those attending. For further information call Ext. 3522.

TV - SPOTLIGHT ON UNIVERSITY OF GUELPH, Experience '79, 17:00, Cable 8.

Bible Study - GUELPH CHINESE CHRISTIAN FELLOWSHIP, 19:00 to 20:30, 8th fl. lge., Arts.

SATURDAY, 79 09 08

Arboretum Weekend - The Arboretum, the J.C. Taylor Nature Centre and the trails are open to the public for strolling and browsing every Saturday and Sunday from 09:00 to 16:00; AUTUMN FLOWER WALK, 13:00 to 15:00, meeting at J.C. Taylor Nature Centre. Bring your camera.

Orientation Week - LENNOX ADDINGTON EARLY MORNING STRETCH, 08:30; LENNOX ADDINGTON HEALTH FOOD BREAKFAST, 09:00, SHINER-AMA, all new students participate to raise money for Cystic Fibrosis fund, 10:00, UC courtyard; FILM: TBA, 19:00 and 21:30, Phys. Sc. 105; ENTERTAINMENT, featuring David Wilcox, 20:00, PCH; LENNOX ADDINGTON DANCE, 21:00, Cafeteria.

SUNDAY, 79 09 09

Worship - CATHOLIC MASS, 10:00, UC 103.

Orientation Week - TRIP TO ELORA GORGE, 12:00 to 17:00, bus leaves from Macdonald Hall and UC; LAMBTON HALL BIKE RALLY, 14:00; MATURE STUDENT MEETING, 14:00, Faculty Club, level 5, UC; MAIDS HALL BARBECUE, 17:00; EAST RESIDENCE COFFEE HOUSE, 20:00, East lge.; SOUTH RESIDENCES COFFEE HOUSE, 20:00, Prairie Cafeteria; FILM: TBA, 19:00 and 21:30, WMH.

Classes commence

D.V.M. Program - Last day of registration

Orientation Week - PRESIDENT'S LUNCHEON, for new students whose last names begin with letters A through G, 12:00 to 13:30, President's house; EVERYTHING YOU WANTED TO KNOW ABOUT FACULTY BUT WERE AFRAID TO ASK, 19:00, North Residences; ENTERTAINMENT, featuring "Downchild Blues Band", 20:00, PCH.

Registration - CAREER DEVELOPMENT WORKSHOP, until 79 09 21 (first session 79 09 26). Times and registration forms available from the Connection Desk, level 3, UC.

*Continued on page 7.*

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