# 9 May 1985 Vol 2 No 5

## New Master's degrees aim for professions

Chisholm's first Master's degrees by coursework are being launched this year - in marketing and computing.

Approval and accreditation of the degrees was a breakthrough for Chisholm which previously offered Master's degrees only by research and thesis.

Both degrees are unique

offerings in their developed to meet demand and plug holes in the current educational offerings around Australia.

They will further enhance the Institute's reputation as a leader in business and

technology education.
For the David Syme Business School, the establishment of the Master of Business in Marketing by coursework is both a natural progression and a first step into a new area.

The new course is a natural progression for the strong Marketing Department, with its Associate Diploma, Bachelor degree and Graduate Diploma

The Department, under Dr Peter Chandler, is 'probably the biggest centre of marketing expertise in tertiary education in Australia' and clearly has the capability to mount the new course, says DSBS Dean, Dr

Ken Tucker.
The market need for the course to upgrade Australian marketing skills is clear.

'There is no doubt marketing and distribution have long been the achilles heel of Australian industry,' Dr Tucker

But more than that, the shift into Master's by coursework is an important new direction for the whole School and for Australian business.

Dr Tucker has long advocated higher levels of academic training to put Australian business people on an equal footing with their international competitors; in many countries, a Master's degree is considered virtually the basic qualification in business.

But in addition, a trend is developing towards 'much more functionally oriented, hands-on, strategic programs in the middle and upper management areas.

The Master of Business in Marketing by coursework will do just that for marketing in Australia, Dr Tucker says.

Having broken into the Master's by coursework field, the next steps will be to develop similarly oriented courses in other business areas, Banking and Finance and Accounting Information Systems are two, where DSBS has special expertise.

There is no doubt about the market requirement for such courses, with the entry of foreign banks into Australia, the retraining of people in existing banking and finance institutions and the deregulation of accounting, says Dr Tucker.

The Master of Applied Science (Computing) by coursework is both a natural development for the Faculty of Technology and a response to market need.

It is a breakthrough of which the Faculty, which also offers Bachelor degrees and Graduate Diploma courses and Master's by research and thesis, is particularly proud, says the Acting Dean, Mr John White.

He sees the accreditation of the Master's by coursework as a product of Chisholm's vision developing professional education in computing as a specialisation and as recognition that Chisholm has been at the leading edge of tertiary education in computing since the early 60s."

The development of the new course is a direct result of changes within computing, the development of the so called fifth generation' in computing, the era of the 'knowledge engineer' and 'expert systems'.

'With all the changes taking place in computing, we just had to go to a new course.

'Our Graduate Diploma of Computing and Information Systems was bursting at the seams with all the new material we were cramming into it,' Mr White says.

The Graduate Diploma will remain, in fact it will be a prerequisite for the new Master's program; as will the Master's by research and

They meet different needs all are important,' says Mr

Students for the new course will be computing professionals with a computing science honours degree or Chisholm's Graduate Diploma in Computing and Information Systems, and several years' experience in the industry.

There is no doubt about the market demand for graduates at the end of the course.

While expert systems are in their infancy in Australia, the shortage of local expertise already is showing up.

In the United States where expert systems are taking off in a big way, 'anyone who can spell the words is getting 100grand a year.'

More on Page 2 - the two degrees 



### G-G calls

The Governor-General, Sir Ninian ... ephen and Lady Stephen, were impressed by the range of expertise and the professionalism of Ceramic Design students when they visited the School of At and Design on Caulfield campus last week.

They spent an hour and a half touring the hot and cold glass studios, the clay studio, the drawing room and the School's resource centre.

In addition, they visited the School's on-campus showcase and shop, Chisholm Concepts a financial disaster for Lady Stephen-she bought a number of pieces on the spot), and were shown an audio-visual production on the concrete 'water wall' commissioned by Albury-Wodonga Arts Centre.

'We wanted to show Sir Ninian and Lady Stephen that Chisholm Art and Design was not just another school teaching pottery,' the Head of Ceramic Design, Mr Lindsay Anderson, says.

A major upcoming show is the exhibition to be taken to China early next year, Sir Ninian and Lady Stephen had the chance to see some of the work already assembled for that.

Some of that work now is on clisplay until 17 May at the ANZ Bank headquarters at Collins Place in the city.

# CAD-CAM sees optical link

Paper tape is out, fibre optic cable and handheld computers are in to link computer draughting (CAD) and computer controlled machine tools (CAM), according to Senior Lecturer in Mechanical Engineering, Mr David Tyler.

Mr Tyler, with assistance from three students, Mr Peter Stevens, Mr Bruce Olsson and John Simmons, has developed Chisholm's CAD and CAM units into an integrated system which he is more advanced than anything available elsewhere in tertiary education in Victoria and possibly Australia.

The system, developed on a shoestring budget, is also more advanced than systems available in most factories.

The development of the system could have important implications for Australian industry, particularly medium to small industry which does not have access to overseas expertise and large development budgets.

It means expertise now is available at Chisholm to assist manufacturers to increase the efficiency of their CAD-CAM operations.

computer aided draughting equipment and manufacture on computer aided machine tools has long been a problem for industry, Mr Tyler says.

So in 1983, when the Department of Mechanical Engineering ordered its first computer controlled machine tool, a Mazak vertical machining centre, Mr Tyler began exploring the possibilities of a direct link between the new machine and the existing Hewlett-Packard computer aided draughting system.

The link involved problems - turning the design parameters on the CAD equipment into instructions for the CAM equipment and the physical transport of the information between the two.

Mr Tyler tackled the first problem by taking Professional Experience Program leave last year and working with ECS (Engineering Computer Sales) of Clayton to develop a postprocessor software package.

ECS is marketing the package to industry.

'The package interrogates the drawing files generated by the draughting system and produces industry standard machine tool code which The link between design on drives the Mazak and many

other computer aided machine tools,' Mr Tyler says.

The package is not unique in Australia some processing is done here - but a lot of it still is carried out overseas, Mr Tyler says.

'We've got this package in Melbourne now which is as good or better than anything available elsewhere."

Having developed the postprocessor package to provide the language interface between the CAD and CAM equipment, the next problem to tackle was the physical link between the two.

Most of Australian industry using CAD and CAM equipment makes the link with paper tape.

The instructions for the machine tool are punched on to paper tape which then is physically transported to the factory floor and fed into the machine tool.

But paper tape has disadvantages; the tape itself can be damaged, which means that a whole new tape has to be generated, and there is programming inflexibility once the tape is made, no changes can be made to the program without generating a whole new tape.

More Page 3

### -New Master's degrees

### Marketing course is specialised

The Master of Business in Marketing by coursework is more specialised than the usual business Master's, the Master of Business Administration, and is aimed at a different market segment, according to the Course Leader, Dr Peter November.

'This Master's degree is aimed at people with an appropriate first business qualification and sufficient business experience to benefit from a truly advanced course of study in a specialised business area.

'It is designed for middle managers who intend to become marketing directors and for marketing directors who recognise the need in their present job to substantially improve their professional expertise and effectiveness,'

'What students learn in the course will enable them to direct a complete marketing operation at the corporate level.'

This contrasts with most MBAs by coursework.

Surveys of entry qualifications of MBA applicants show most have first qualifications in nonbusiness areas; engineering, science and arts being the most common.

In addition, students are relatively young in their early 20s.

'This is not surprising as the majority of MBA programs are designed as conversion courses," Dr November says.

The orientation of the Master of Business in Marketing by

coursework is implicit in every aspect of the course.

Applicants not only need a Bachelor degree or Graduate Diploma in business and a minimum of five years' relevant work experience, but they must survive an interview with Dr November, have the backing of their employers, and gain the approval of the Master of Business in Marketing Board.

The study arrangements reflect the high level of commitment and motivation expected of the students, and their involvement in employment.



**Dr Peter November** 

The course is being offered only part-time, over four years, attendance at Caulfield campus on one day a

All classes will be seminars, with students providing both input written and verbal backed up by solid study.

Assessment will be a mixture of continuous, examinations, project work, a publishable article and a final viva voce examination.

The course is divided into two

Part one updates students in the foundation subjects of business, providing a 'level, and breadth of knowledge that is not only appropriate for a marketing director but is at the forefront of current knowledge,' November says.

Two marketing subjects, market analysis and marketing strategy and tactics, are included in part one, along with accounting, organisation dynamics, decision support systems, economic analysis and public policy, finance, and legal analysis.

Part two concentrates on the marketing director's job.

The four units included are marketing decision making, marketing planning, marketing implementation and marketing monitoring and modification.

### A new era begins for computing

The Master of Applied Science (Computing) coursework is designed to move computing professionals into the future, says the Course Leader, Mr Jack Greig, Head of the Department of Information Systems.

'A major thrust of the course is to bring current practitioners into the new era of computing that is just beginning, the start of really using computers,' Mr Greig says.

'We are just coming out of the primitive age of computing what's happening now with the development of automated systems and artificial intelligence is an enormous leap forward.

the US, computer scientists are seeing the potential for rewriting everything that has been done up to as well as using computers in ways we are only just beginning to think about.

'Australians must play their part in these new developments, and that's exactly what the coursework Master's is designed to enable them to do.

The changes are in the development of automated

systems using established methodologies and in the development of expert systems.

'A lot of systems analysts throughout the industry are sitting down right now doing things by hand that could be automated using conventional approaches,' Mr Greig says.

The Master's program will address that problem.

But the other major thrust of the Master's, using expert systems, is more revolutionary.

'It's a whole new area for the industry, and one it needs to get into quickly to meet the challenge from overseas,' Mr Greig says.

With expert systems, a logic shell or structure is established, then the knowledge is plugged into it so the computer 'thinks' through a whole system of possibilities to come up with an answer.

One of the first and most dramatic illustrations of an expert system was in the field of medical diagnoses.

With an appropriate shell and information on symptoms gleaned from medical specialists and texts, the computer could

Mr Jack Greig

not only handily out-diagnose the average medico, it could match or beat the experts from whom its basic information came in the first place.

It was particularly good on rare diseases perhaps because it did not have the human concern about loss of face if it made a mistake!

Variations on these systems can be used in field after field, Mr Greig says. Because of

the forward looking nature of the course, it has been accredited with a wide range of subjects but no formal course structure.

This is to allow students maximum flexibility to achieve their own objectives within the broad parameters of the course and to allow for the course itself to be flexible enough to cope with the new developments in the field.

Initial enrolments to the course will be 10 part-time students who will study for two years to gain their Master's degree.

At the end of the course, says Mr Greig, 'their potential for rapid career advancement will be enhanced.

They also will have the potential for helping to guide the Australian computing industry into computing era.

### etter

From: Paul Lochert, Senior Lecturer in Mathematics.

It is possible for the number of votes a voter is entitled to to be a function of the way they vote?

Any rational response to this question would surely be no, except that the voter may choose to default.

In any standard voting procedure each voter would expect to have the same voting rights as another or if a weighting factor was involved, this factor would be defined.

In contrast at Chisholm we now have a system that allocates two votes to some voters and one vote to others with the allocation being a function of the voting pattern.

ction were for x vacant positions then any given voter may by chance obtain an allocation of from one

To see how this can be so examine the following.

An election was run for two positions on the Faculty Board of the Faculty of Technology. The results of the poll were

The technique used to distribute votes gives some voters two votes and others one vote. This appears to be an anomaly in the technique.

To clarify, a voter who gave first preference to HEWITT was recorded as one vote while a who gave preference to either HANSON or ARNOTT also had their second preference counted and used as well as their first preference hence two votes.

if the intention is to allow each voter to select two candidates and hence have two votes, then this should be spelt out and a system to truly give two votes to each voter implemented.

I would propose the following: Each voter is to mark the two preferred candidates with a '1 and then allocate preference (optionally) to the remainder of candidates.

All first preferences are counted, that is 2n votes cast by n voters. Then the candidate with the lowest total is removed and second preferences on those tickets allocated.

This process is continued, allocating the highest unallocated preference at each stage until two candidates remain.

process can realistically extended to an election for any number, x, of positions.

It would require that the voters are informed that each are in fact allocating x votes and hence will record a 1 next to x candidates with others recorded in order of preference.

Signed:

Paul Lochert

Change is on the way to the Institute's electoral system, according to the Academic Secretary, Mr Paul Rodan, who is Deputy Returning

'I am pleased to report that Mr Lochert is preaching to the converted,' Mr Rodan said.

'The Legislation Committee already has agreed in principle that a system of proportional representation, similar to that used in the Senate elections, should be introduced.

He said it was hoped the new system would come into effect in the last quarter of this year.

Proportional representation was more complex but it had the big advantage of giving smaller groups more chance of representation.

Mr Rodan said the present system was not: without precedent - it was used in Senate elections from 1901 to 1918 before the change to proportional representation in

### New markets for Caulfield cafe

The Caulfield cafeteria is going into the family pie business in a big way.

The Business Manager, Mr Alan Hamstead, says the cafeteria not only is selling its freshly baked pies on campus see the advertisement in the Classified section) but also is supplying its savoury and dessert pies to hot bread shops in nearby areas, Tooronga Village and the Glenhuntly Road shopping centre.

By the end of the month, they will be on sale at Prahran market on Saturday mornings

Mr Hamstead says the move into the pie business is an attempt to maintain the cafeteria's status as totally self-funding while holding down prices to a minimum.

'The cafeteria has never been subsidised by the Institute - it has always had to meet all its own expenses including replacement of furniture and equipment,' Mr Hamstead

'This contrasts with other colleges, where the cafeterias not only are subsidised in some way, but the selling prices on most items are higher than at Chisholm.'

Holding down prices while maintaining food quality has always been a primary aim of the cafeteria.

The fact that Caulfield's cafeteria has been able to both fund itself and hold down prices is a tribute to the work of its staff, particularly the Catering Manager, Mr Alan Nicholson and the Operations Manager, Ms Gwen Alleyne, Mr Hampstead says.

The cafeteria's current problem is due to two factors, the oncampus market shrinkage as TAFE students move away and the rise in costs because of recent salary increases.

### Open L change

Open Day 1985 has been rescheduled to Sunday 18 August to avoid a clash with RMIT on the date originally chosein.

The Academic Board approved the change at its meeting on 17 April.

The Admissions Officer, Mr Phil Invine, will convene a meeting of the Open Day committee shortly to begin planning the event on both campuses.

The Institute has budgeted \$10,000 for Open Day this

reported as:

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HEWITT, David	33	+ 8 = 41	33	+ 28 = 61 Elected
HANSON, Jeffrey	38	+ 9 = 47 Elected		
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# Frankston studio will launch student careers

demonstrate the direct CAD-CAM link

The School of Art and Design has launched a new concept in ceramics consultancy and education.

With the establishment of a Ceramic Production Studio at the Institute's Frankston campus, the Department of Ceramic Design now offers clients complete service from original design through to production of ceramics on a small or grand scale.

Backed up by the Clay Workshop which produces quality clay at a reasonable cost, and the on-campus gallery, 'Chisholm Concepts', the Studio is equipped to meet a vast array of ceramic design needs.

Staffed by final year students of the Institute's Bachelor of Arts (Ceramic Design), and with back-up on hand from the Department's pool of 24 staff and 200 students, the Studio offers:

 Artists who can design anything from a fountain, concrete mural, or glass door to a coffee set or clay figurine. • Craftspeople capable of producing original light fittings, interior decorator items with a strong corporate identity, ceramic furniture or quality

 Technicians who can supply plaster moulds, advise on casting slips or recommend suitable glazes.

'As an Institute we are prepared to meet any demand, not just in the design and production of ceramics, but also works in concrete and glass', says the Head of the Department, Mr Lindsay Anderson.

'We have always required our Degree students to complete an outside commission before qualifying in the course, and accordingly, members of staff have had considerable experience in helping students satisfy the demands of clients and meet contract deadlines, Mr Anderson says.

Past commissions have covered a diversity of requests, including a concrete foundation and ferro cement playground for the pedestrian mall in

Stawell, Victoria; a terra-cotta, high relief water wall for the Albury Regional Art Centre sculpture courtyard; a concrete mural, 'Strength and Mobility' for the external wall of the Physical Education centre at Footscray Institute of Technology; and a glass cieling for the dining room of 'Truro', a property at Glenmaggie, Victoria.

The new Ceramic Production Studio also fulfills another important objective of the Department - bridging the gap between tertiary study and employment.

'We aim to cover the needs of emerging craftspeople', Mr Anderson says.

As such we are acutely aware of our reponsibility to launch the people we educate.

The Studio will enable selected graduates to rent studio space for up to 12 months learning what is involved in the day to day routine of being an independent ceramicist, and the disciplines of organising themselves as craftspeople.

### From Page 1:

### CAD-CAM link

The big advantage of paper tape is that it is not subject to electrical interference.

'Ordinary wiring is out to link the CAD and CAM because of electro-magnetic interference which is why industry went the paper tape route in the first place,' Mr Tyler says.

'With wire links, someone closing a switch on a big motor in the factory or just a motor running near the wire could generate interference which would become random signals on the wire.

'That's just what you don't want in a computer system.'

Despite the wide use of paper tape, Mr Tylor and his team decided it was not the way for the future.

To replace it, they have developed and tested two options.

The first is a fibre optic link. 'It's ideal for distances of up to two kilometres between the CAD in the design office and the CAM on the factory floor,' Mr Tyler says.

'It's a bit more expensive than a wire link would be, but so long as light cannot get in, it is not subject to interference.

'You would wrap it around an electric motor if you wanted to and there would be no interference.'

The other is an electronic version of the paper tape link-loading the complete, post-processed CAD program into an inexpensive handheld computer, walking that to the CAM operation and loading the machine tool's computer from the handheld job.

To illustrate just how shoestring the operation was, Mr Tyler and his team had to borrow the handheld computer, a Sharp PC1500, and interface from a research student in the Department.

'It's surprising how much information the handheld computer can store and the position is improving all the time with more models with bigger memories becoming available,' Mr Tyler says.

He admits the technique has limitations, it could not carry the information for machining very complex dies, for example, but says it would be perfectly satisfactory for a vast range of work.

In addition, of course, there is

the option of taking the CAD machine right to the CAM unit and plugging it straight in.

But that is not convenient or even possible in many industrial applications, Mr Tyler says.

The big advantage in the fibre optic or handheld computer link between CAD and CAM units is flexibility.

Program errors can be corrected or alterations made to produce modified or new products very rapidly.

In addition, the fibre optic link provides the potential for greater integration of computer controlled machinery - taking automation a step further.

Mr Tyler cites the most advanced Japanese manufacturers, who use such links to provide automation over a wide range of machines, all controlled by a central computer to provide highly efficient, integrated systems.

With the expertise developed in setting up Chisholm's CAD-CAM system as an integrated unit, Mr Tyler says the Department now can offer industry advice or assistance in setting up similar systems or parts of systems.

In the educational field, the system will play an increasingly important role in the training of young engineers.



Mr Dave Tyler

The subject on the applications of computing in engineering is an option at present, but in the revised and updated course now being phased in, the time spent on this is being doubled and it is being made compulsory to ensure students are trained for an automated tomorrow.

Industry, Mr Tyler says, can update equipment to the newer technologies secure in the knowledge that the engineers are being trained in the skills to exploit it.

### External News

## Women in science

Women's access and achievement patterns in the fields of science and technology will be the subject of a study to be undertaken by Dr Elizabeth Hegarty, School of Microbiology, University of NSW, Ms Frances Lovejoy, School of Sociology, University of NSW and Professor Eileen Byrne, Department of Education, University of Queensland.

The study, which is expected to cover four years, will look at women's access and achievements in these fields at school, in higher education and in employment.

It will examine the factors which are effective in attracting women to study science and technology and seek to discover what discourages women from enrolling and continuing in these fields or from going on to post-graduate studies.

'This project relates closely to one of the central objectives of the Government's policies for women - the reduction of educational and occupational segregation,' the Minister for Education, Senator Susan Ryan says.

'It is concerned with increasing opportunities for education and careers in science and technology for women.'

The Commonwealth Tertiary Education Commission has allocated \$25,000 for the project in 1985 and \$20,000 has been allocated under the Participation and Equity Program.

# UNESCO link to continue

UNESCO will continue to be active in Australia in the coming year, according to the chairman of the Australian National Commission for UNESCO, Professor Ken McKinnon.

Professor McKinnon says the Australian National Commission will continue to sponsor projects consistent with UNESCO's aims, such as overcoming illiteracy, protecting the environment, and improving communications between peoples using new technologies,

He says while there is a swirl of political debate around UNESCO following the withdrawal of the United States from the Organisation at the end of 1984, the often unnoticed good work that UNESCO does continues apace.

The 39 member Commission, composed of academics, community leaders and political figures, advises the Federal Government on Australian policy towards UNESCO.

It acts also as a link between Australians interested in the fields of education, science, culture and communication, and the UN body.

## Contact

The Women's Information and Referral Exchange, WIRE, has been set up as a self-governed, community-based service funded by the State Government to assist women in accessing information and supportive networks in the community.

The service is staffed by a nucleus of full-time paid workers, backed up by volunteers.

It is prepared to take all kinds of calls, from women needing some emotional support to those needing information on how to handle such things as child abuse, sexual harassment, or divorce.

In addition to assisting individuals, WIRE aims to inform Government and community services of women's information needs, provide assistance to established agencies, encourage women to understand their rights, and to create an awareness amongst women of the power which information gives.

The service is available from 10am - 5pm, Mondays to Fridays on 63 6841. A special number, (03) 63 7838, has been set aside for calls from country women.



US tax expert, Professor Staubus (centre) at Frankston with (I. to r.) Mr Graeme Weideman, MLA, Frankston South, the Director, Mr Patrick Leary, the Mayor of Frankston, Cr Diane Fuller, and the Dean of the David Syme Business School, Dr Ken Tucker.

### Reform taxes to avoid avoidance

Australia's income tax system is going the same way as that of the United compliance, according to level at which income became visiting US taxation expert, taxable. **Professor Staubus.** 

Speaking at a public lecture would: to an audience of 200 in the George Jenkins Theatre, Frankston campus, Professor Staubus said major tax reform was needed.

Without it, 'there would be continued degeneration in compliance with income tax loss of faith Government, and ultimate breakdown in income tax as the main source of government revenue.

Professor Staubus said both US and Australian economies already showed a lack of compliance with existing income tax systems and lack of respect for government in the 'sophisticated subterrainean economy of tax avoidance.

Much of the incentive to avoid paying tax arose from high marginal income tax on wages and salary earners, he claimed.

Where 25 years ago the highest income tax bracket was 18 times average weekly earnings, now it was only twice

General Staff Development

Program, Mr Eric Formby, is

developing a number of in-

house course proposals for

other areas will be put to the

'The need for courses in these

areas became apparent from

Committee soon.

consideration for funding.

Professor Staubus proposed that income tax reform should include reduction of high States - losing respect and marginal taxes and a rise in the

Such reform, he believed,

- Diminish the incentive for high salary earners to avoid income tax.
- Encourage savings by high tax bracket households (such savings were almost nonexistent in the US, Professor Staubus said).
- Encourage commitment by individuals to one job and interest in gaining promotion, rather than seeking to 'moonlight' or have a spouse take part-time work as part of family arrangements to avoid
- Encourage productivity.
- Stimulate youth employment opportunities.
- Provide more relief for the poor at the bottom end of the income scale.

Professor Staubus is Professor Accounting, University of California, Berkeley. His public lecture was sponsored by the Department of Accounting, David Syme Business School, where Professor Staubus was on a two week visiting fellowship.

The response to that request

Details of courses available

In the meantime, funds still

proposals, whether for individuals

But Mr Formby urges those

was 'reasonable', Mr Formby

### Aid on AIDS

The Institute Health Service is getting a lot of questions about AIDS, Acquired Immune Deficiency Syndrome, according to the Health Service Co-ordinator, Dr Livia Jackson.

'We want people to know we are prepared to listen to them and to discuss their queries about AIDS,' Dr Jackson says.

Dr Jackson says she has been in contact with the Victorian AIDS Council, and hopes to get speakers to Chisholm within the next few months to discuss AIDS in detail both at an open seminar and at meetings Community Services staff.

In the meantime, Dr Jackson says the appearance and rapid spread of AIDS clearly is very worrying.

But she says the US experience, where 95 percent of AIDS cases have occurred in people belonging to six distinct groups, indicates that it is extremely unlikely that AIDS will be transmitted by casual contact with AIDS sufferers or persons in the high risk groups.'

'It is unlikely that it would be spread through sharing crockery, cutlery and so forth, provided normal standards of hygiene apply.

The figures indicate that AIDS is transmitted only through intimate contact where there is an exchange of body fluids' such as in sexual activity intravenous drug use or blood transfusions.

The identified high risk categories in the US are:

 Homosexual and bisexual men - about 72 percent of all reported cases.

 Present or past users of intravenous drugs-17 percent. Recipients of blood or

blood products from AIDS infected donors - two percent. Haitian entrants to the US

four percent.

 Sexual partners of those in the high risk groups.

 Children of parents belonging to the high risk parents groups (only a small number of cases).

Present evidence indicates that the pattern of distribution of the disease in Australia is similar to that in the United States.

Dr Jackson says those who wish to know more about AIDS or want tests to check for the possible presence of the disease should contact Chisholm Community Services, or the Victorian AIDS Council at PO Box 174, Richmond, 3121, phone 417 1759.

### -WHAT'S ON-

### **Tasmanian** art at Chisholm

Work in clay by 17 students from the Tasmanian School of Art, University of Tasmania, will be on show at Chisholm Institute of Technology's Caulfield campus from Saturday 11 May to Thursday 16 May.

The exhibition includes both expressive and utilitarian pieces and was designed to demonstrate the range of techniques, materials and ideas students from first year to Master's degree level have brought to the clay medium.

Interestingly, 14 of the contributing students are women.

The exhibition will be open daily from 10am to 5pm in the gallery foyer, Level 2, of the Phillip Law Building (B block), on the corner of Railway and Queens Avenues, Caulfied

Prices for the work range from \$12 to \$260.

### School of Art and Design

WORLD TRADE CENTRE GALLERIA, 13 - 23 May. The first major exhibition as a School for 10 years, featuring the work of about 150 students in ceramics, concrete, hold and cold glass, sculpture, prints, graphics and paintings. This is a show, not a sale.

STATE BANK GALLERIA, 13-May. 'The Changing Environment ceramic con-struction by five students for the Victorian Ceramic Group. State Bank building, corner

Bourke and Elizabeth Streets,

ANZ BANK, 7 - 17 May. Chisholm Ceramics'. Pieces in this show will form the nucleus of the Ceramic Design Department's exhibition to go to China early next year. At the ANZ Bank headquarters, first floor, Collins Place, City.

### Caulfield **Arts Centre**

POTTERY BY THANCOUPIE-BATIKS FROM THE WOMEN AT UTOPIA, 7 - 16 May. Australia's first professional Aboriginal potter, plus batiks by the women at Utopia station. JUNIOR CONCERT BAND PERFORMANCE, 12 May, 2pm. The vibrant junior concert orchestra is still looking for new members.

FROM FRANCE: JEAN-CLAUDE PICOT, 18 - 23 May. Oils, watercolors and lithographs Opening at 2pm, Sunday 19 May, and a special showing until 9.30 pm on Wednesday 22

May.

BOOK AUCTION, 20-22 May. Fine and old books.

SCULPTURE EXHIBITION, 24-26 May. Bronze sculptures by nine artists. Opening at 7pm, 24 May. PAINTINGS AND SCREEN

PRINTS BY STEPHEN GLOVER, 31 May - 10 June. TERM II CLASSES: Obtain

the brochure by calling at the Arts Centre or phoning 524 3277.

Caulfield Arts Centre, 441 Inkerman Road, Caulfield, phone 524 3277. Open 10 am - 5 pm, Monday to Friday, and 1 - 6pm, Saturday and Sunday.

### Spiritual woman

Welfare Studies lecturer, Ms Ryl Currey, is devoting six months PEP leave to researching the question of how women express their spirituality.

Ms Currey intends making contact with as many groups of women as possible, and is interested in hearing from any Chisholm staff or students willing to participate.

Her book, 'Bare Fruit, A Woman's Theology', released late last year, details Ms Currey's own response to the topic.

She can be contacted at work (Caulfield ext. 2369) or at home, telephone 255 783.

### CARPET CLEANING

Premises department now has a high pressure hot water carpet cleaning service to carry out all carpet cleaning requirements either during normal working hours or during semester break.

The equipment is quiet enough that daily operations will not be unduly disturbed.

Co-operation will be needed in 'moving heavy furniture such as bookshelves and filing cabinets if a 100 percent coverage is required, otherwise a clean of only accessible areas will be done.

The cost for this service is 65 cents per square metre with a minimum charge of \$32.50.

Those needing carpet cleaning should forward an internal maintenance requisition to Mr Mark Watson, Premises Department, or phone on Caulfield 2214 for a quotation.

### CARNA PIES

In response to the seasonal chill, the cafe at Caulfield again is selling a range of family (229 mm or 9" for the unmetricated) pies, savories and sweet, as take aways.

The savoury pies, egg and bacon, curried beef, chicken and vegetable, cheese and

onion, steak and kidney, steak and mushroon or steak and tomato, are \$4, while the sweet, apple, apricot or peach, are \$3.

Orders may be placed by phoning Alan or Gwen on Caulfield 2110.

WANTED: Adventurous people for a three week light aircraft safari holiday to Darwin, Queensland Coast and places in between. Leaving 10 August, estimated cost \$2,000 includes all transport, tours, accommodation, and some meals. Contact Barry Bron, Caulfield 2594

## GAZETT

The next issue of the 'Chisholm Gazette' will be published on 23 May. The deadline for copy, editorial or advertisements, is Tuesday 14 May. Material should be delivered to the Public Relations Office, C1.08, Caulfield campus, or phone Caulfield 2099.

## 

Training courses

The Executive Officer of the course proposals and ideas,'

Outlines of courses dealing will be announced as soon as

with computing, touch typing the Committee has approved

General Staff Development are available for more GSD

staff response to the Committee's with proposals to contact him

for non-secretarial staff, and and funded them.

request for development as soon as possible.

Mr Formby says.

or for groups.

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