

MIZZOU

W E E K L Y

University of Missouri-Columbia / April 23, 1991

ON THE INSIDE

Page 2 Printing Services is preparing to move its operation to a new location, beginning next month.

Page 7 Mizzou archaeologists are uncovering secrets in an old Roman town on the island of Cyprus.

Page 8 A play being staged this week by MU's Black Theater Workshop presents a universal theme in non-traditional ways.

Moment of decision

Faculty will vote this month on University's proposed general education plan.

A package of proposed general education requirements will be one of the biggest topics of discussion at the April 30 general faculty meeting. In a ballot mailed this week, all regular faculty members are being asked to approve the initiative, which would establish a single set of general education requirements for all undergraduates. The ballots must be returned by May 3 (See related story on Page 2).

A campuswide faculty task force developed the "General Education Architecture" over the past several years. The Faculty Council approved the plan last year, and earlier this month agreed to send the issue to a vote of the faculty. To be approved, the plan requires a positive vote by two-thirds of regular faculty and also must be passed by a simple majority in two-thirds of MU's schools and colleges.

"We want to make sure faculty approve of this and stand behind it," Stuart Palonsky, professor of curriculum and instruction, says of the stiff voting requirements. Palonsky is chairman of the task force that developed the plan.

Among other recommendations, the plan would require all undergraduates to take a class requiring quantitative

proficiency beyond college algebra, two writing-intensive courses and a "capstone" course designed to bring together what a student has learned. The plan also requires students to take two nine-hour "clusters" of courses in fields outside their major areas, as well as an undergraduate seminar during their first 60 hours of course work.

In February, a faculty committee issued its final report on how the general education proposal could be implemented. The panel estimated a \$2 million total price tag, and recommended the plan be phased in over six years at an annual cost of approximately \$330,000.

Another feature of the plan calls for an undergraduate curriculum committee to oversee the general education requirements. Palonsky says the committee will "allow continuing discussion of what is the best curriculum for students."

In a letter to faculty, Provost Gerald Brouder assured them that a favorable vote on the general education initiative would "result in prudent control of budget so that paying for the plan will be accomplished with specified funds saved from administrative costs and other areas."

"I sense that most faculty favor the general education architecture," says Allen Hahn, Faculty Council chairman and professor of veterinary medicine and surgery. "The big question comes with how the increased costs can be met." He adds that the implementation committee's cost estimate is realistic. "This wasn't just some administrators sitting around saying, 'Oh, this will cost so much.' Faculty sat down and studied this thing for the better part of two semesters."

The single most expensive item in the plan is \$600,000 for

the undergraduate seminar. Members of the implementation committee estimate the seminars would require 15 new faculty and as many as 60 new class sections, although some existing courses could be modified to meet the requirement.

To give departments time to develop new seminar courses and recruit necessary faculty, the undergraduate seminar would be the last part of the package to be implemented, beginning with the 1994-95 school year. Some segments of the general education package could be met by modification of existing programs. For instance, the composition, mathematics and lab science requirements

already are met by most students and would have an impact on a relatively small number of undergraduates. The computing and information literacy requirement could be met with existing computer labs and staff.

In other areas there would be a moderate expense for expanding required programs. A second writing-intensive course would cost an

estimated \$160,000, primarily for additional teaching assistants. An estimated \$300,000 would be needed to develop capstone courses, and another \$240,000 would be budgeted to develop cluster courses.

Will the proposed new requirements cause massive re-scheduling of classes? "We don't think so," Hahn says. "Remember, it will be phased in over three years."

If faculty endorse the proposal, the new requirements will apply to freshmen entering Mizzou in fall 1993. "That gives us two years to put it into place," says Jeff Chinn, vice provost for instruction. "It will take some work. Many of the current courses will need to be modified and restructured, but not thrown out."

A complete copy of the general education plan may be found inside this issue.

Showing appreciation

Former education professor, staff couple receive awards as University's retirees of the year.

The University honored a former faculty member and a retired staff couple with Retiree of the Year Awards last week. But to hear the winners tell it, they are the ones who should be honoring MU.

"After all, the University gave me the opportunity to do my work," Veralee Hardin, retired professor and chairwoman of special education, told more than 750 gathered for the chancellor's annual retiree luncheon April 16 at the Hearnes Fieldhouse. "I feel as if I should be giving the award rather than getting one."

Likewise, Jerome and Marie Mason were generous in their thanks. He retired in 1984 as head janitor at Johnston and Wolpers halls, and she retired in 1982 as a maid. "We're the ones who are grateful to you," Jerome Mason told the group.

The awards are based upon accomplishments during retirement. Since she left MU in 1987, Hardin has developed a program to help children with learning difficulties. The plan, Alternative Intervention Strategies, is designed to create teacher support teams to identify and help at-risk students. The approach is now being used at schools across the state.



From left, Marie and Jerome Mason and Veralee Hardin are the 1991 retirees of the year. The three were named April 16 during a luncheon to honor MU retirees.

"She is a living demonstration that contributions to the future of society need not diminish with retirement," Chancellor Haskell Monroe said.

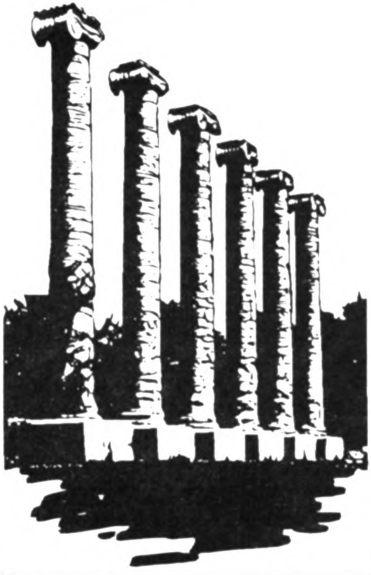
The Masons, who live on a 100-acre farm near Rocheport, have raised 19 foster children, along with a niece and a nephew. They adopted five of the foster children, and four of them, ranging in age from 12 to 18, still live with the couple. "It has been fun having kids," Marie Mason said. "We don't regret it a bit."

In honoring the Masons, Monroe quoted one of their adopted children: "There could be no better example of the strength of the human spirit and the service of the human heart . . . The Masons' investment of time, love and energy is the finest example of people contributing to society."

This was the 20th annual retirees luncheon, coordinated by the chancellor's advisory committee on retired faculty and staff. Committee chairman Bob Daniel, professor

emeritus of psychology, noted that the first luncheon was held in the Memorial Union and drew about 350. "In past years, the response has been so good that we've had to move to the Hearnes Fieldhouse," he added. "Attendance has grown every year."

Hardin attested to the importance of the event. Speaking from the podium, she thanked Monroe for recognizing the contributions of retirees. "This is a strong reminder that we are appreciated," she said. "It means a lot to us."



FACULTY TO MEET APRIL 30

Chancellor Haskell Monroe will give a report on the state of the University at the spring general faculty meeting, at 3:40 p.m. April 30 in the Memorial Union Auditorium.

Other reports will be given on MU PAC and on the progress of tax-increase legislation. Provost Gerald Brouder will discuss the long-range plan; Allen Hahn, chairman of the Faculty Council, will give a report; there will be discussion of the proposed general education curriculum; and faculty committees will give reports.

TWO TEACHERS DRAW PRAISE

Students in the College of Agriculture, Food and Natural Resources honored two of their teachers April 11.

Jerry West, professor of agricultural economics, was selected adviser of the year. Michael F. Smith, associate professor of animal sciences, was given the Green Chalk Award for excellence in teaching.

West, who has been at MU 33 years, advises 50 students and teaches courses in principles of agricultural economics, agricultural prices and agricultural policy. Smith, who has been on the faculty 11 years, conducts research, advises 16 students and teaches undergraduate and graduate courses in animal reproduction and physiology.



TWO BLOOMIN' GOOD SALES

It's spring: Time for warm breezes, late evenings . . . and Horticulture Club plant sales.

The club will have two sales in the next few days. From 8 a.m. to 2 p.m. April 24, the Secretary's Day plant sale will be in Greenhouse 16, next to the Physics Building. Featured items will include bud vases, novelty planters and blooming flowering plants.

The annual bedding plant sale will be in the greenhouse from 8 a.m. to 5 p.m. April 25 and 26. Flowering bedding plants, potted geraniums, flowering hanging baskets, herbs and perennials will be featured.

Faculty urged to approve general education plan

The chairman of the Faculty Council is making a strong plea for approval of the general education plan (see related story on Page 1 and a copy of the plan, inside this issue).

"This proposal has been endorsed by all the faculty and administrative groups that have studied it," Allen Hahn, professor of veterinary medicine and surgery, told the council at its regular meeting April 18. "We encourage you to go back to your faculty and urge them to vote for the plan."

Hahn said "yes" votes are especially important since two-thirds of the faculty and two-thirds of MU's schools and colleges must approve the plan. The ballot is printed

on the back of a letter from Hahn and Provost Gerald Brouder that will be mailed to faculty this week.

The ballots must be returned by campus mail to the Faculty Council office, 117C Dalton Research Center, by May 3. "We'll be discussing the plan at the general faculty meeting April 30," Hahn said. "So if your colleagues have any questions, they can bring them up at that time."

In other matters, the council:

■ was urged to survey faculty and students next academic year on a plus-minus grading system for Mizzou. Russ Zguta, professor and chairman of history and

chairman of the council's academic affairs committee, said his group had studied the issue this year, but further study is needed. "We would urge that the council continue to look at research being done nationwide on plus-minus grading," Zguta said. "We also would hope that the policy committees of the University's schools and colleges take a look at this. And we strongly suggest a survey of faculty and students."

■ discussed long-range planning efforts at MU, particularly the establishment of two new committees involved in the planning process. Member Don Sievert, professor of philosophy, noted that while faculty are represented on the committees, the full Faculty Council is not directly involved. "My initial response is that the council is busy enough as it is," said Hahn, a member of the long-range planning committee. He said he would bring the matter before the

committee at its next meeting.

■ decided to ask its faculty affairs committee to study faculty eligibility for campus committees. The issue was brought up by member Jay Dix, associate professor of pathology, who noted that the School of Medicine has a "clinical track" for faculty as well as a tenure track. "We consider them the same, but for some reason the clinical faculty are not allowed to serve on committees," Dix said. "Why?" Member Elaine Lawless, associate professor of English, said a similar case could be made for certain faculty on research grants. "They may have long-standing appointments and be very involved in the University, but they're not included either," she said. The faculty affairs committee will study the issue in the fall.

The council's final meeting of the semester will be at 3:40 p.m. May 2 in S110 Memorial Union.

MIZZOU

WEEKLY

Vol. 12

No. 29

A publication of the University of Missouri-Columbia faculty and staff, published every Tuesday during the academic year and twice a month during the summer by Publications and Alumni Communication, a department of Development, University and Alumni Relations Division, 1100 University Place, 882-7357. News deadline is noon Tuesday the week before publication. Annual subscriptions are available for \$20.

Editor: Terry Jordan

Assistant editor: John Beahler

Staff writer: Sue Richardson

Advertising coordinator: Michelle Burke

Graphic editor: Nancy Daniel

Printing Services preparing for big move

Beginning in about a month, Printing Services will begin moving its operation, in stages, to a new facility in the Smith-Lemone Industrial Park on Highway 63 South.

Records Management Services and the University of Missouri Press already are located in that area. Printing Services will continue to be served by Campus Mail Service, and will retain its current telephone numbers.

"The move should be completed by late June, with the office being the final stage of the move," says Rick Wise, manager of customer services. "It is our intention to move the office over a Saturday and Sunday to cause as little disruption of service as possible. Since we will be moving our production equipment to the new location over several weeks, we would appreciate your cooperation and patience."

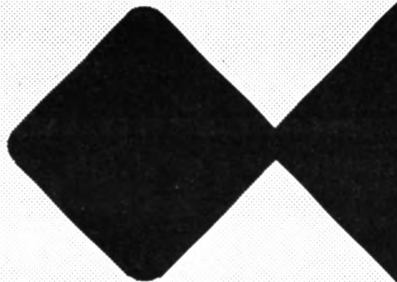
The new facility will be a larger, single-

level plant with all paper inventory under one roof, Wise says. A new specialty press for printing envelopes will be added, allowing Printing Services to reduce envelope prices and increase its production speed.

"In addition to our regular print/blueprint pick-up and delivery service, we will be able to offer you job pick-up at your location if you wish," he says. An open house will be held when the move is completed.

PARKING AND TRANSPORTATION SERVICES

107 SWALLOW
882-4568



The next meeting of the Campus Parking & Transportation Committee will be from 3:40 to 5 p.m. April 30 at S207 Memorial Union. All interested persons are invited to attend.

Employees who wish to cancel their parking permits for the summer must return their permits to our office. Renewing the permit may involve reassignment to a different area. Call our office for more information.

THE Glass Blowing Service

Can assist you with your research projects in ...

- Distillation
- Vacuum Work
- Chromatographic
- Special Glassware

"Save Your Research Dollars"

33 Physics Bldg. 882-4418

REACH 11,000 MIZZOU FACULTY, STAFF AND RETIREES
WITH AN AD IN MIZZOU WEEKLY!

YOUR HELP IS NEEDED

Faculty, staff and retirees are being asked to serve as volunteers for the state high school music festival, scheduled April 26 and 27 at MU's Fine Arts Building.

Volunteers would work two or three hours as room monitors or timers. Each will receive a T-shirt and will be honored at a reception afterward. An orientation session will be at 5:15 p.m. April 25 at the Columbia Convention and Visitors Bureau, 300 S. Providence Road. To volunteer, call 875-1231.

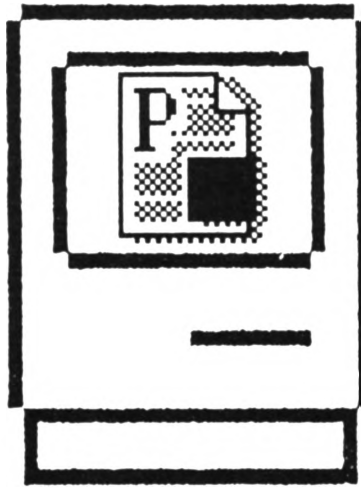


FREE PAGEMAKER WORKSHOP SET

MU employees interested in learning about PageMaker, a popular software package for the Macintosh computer, may want to take advantage of a free, one-day workshop being offered next month by Human Resource Development.

"Introduction to DeskTop Publishing with PageMaker" will be offered from 9 a.m. to 4 p.m. May 16 and 22 in 305 Hill Hall. PageMaker is one of the leading applications used in desktop publishing.

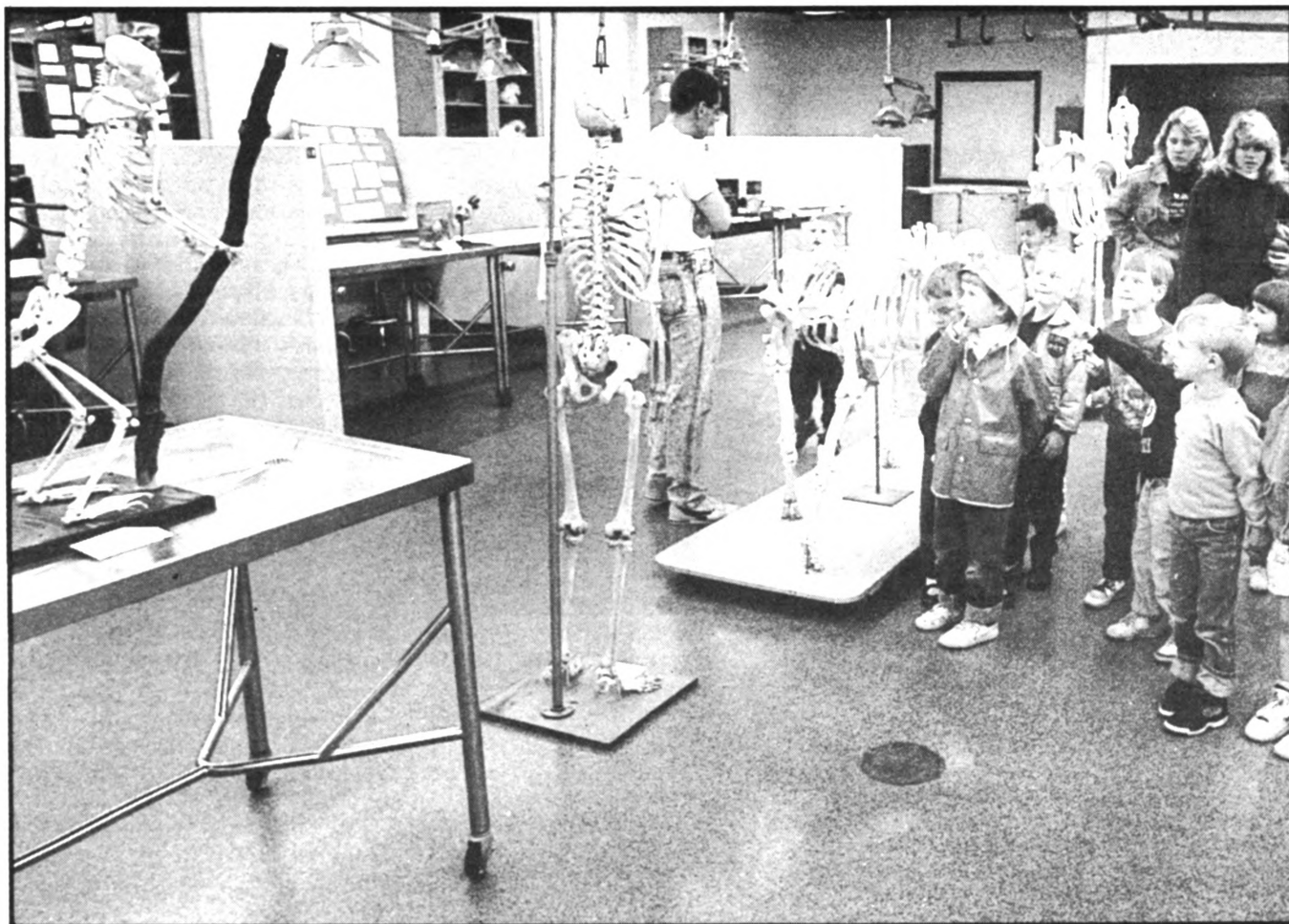
Each class is limited to 10 participants. To register, call Leo Agnew at 882-4859.



NEW AWARD HONORS STUDENT LEADERS

Ten students will be honored next week as the first winners of the University's Emerging Leader Awards. A reception in their honor will be at 7 p.m. April 30 in N201-202 Memorial Union.

The awards recognize students who have demonstrated strong leadership capabilities in social, academic or political organizations. Nominations came from faculty, staff and other students. "It's our way of saying 'thank you' to these students whose efforts have gone beyond the call of duty," says Aretha Jones, coordinator of student services in the Office of Student Development. The winners will receive a certificate.



Rob Hill photo

Boning up

Preschool youngsters have a chance to expand their knowledge of animals at a display of skeletons during the College of Veterinary Medicine's open house on April 12. The theme of the two-day event was "Taking Care of Man's Best Friends."

MU helping Brazilians solve pollution woes

A modern-day gold rush is taking place deep in the sprawling rain forests of Brazil's Amazon basin. Thousands of miners are at work, digging ore from the ground, then using mercury to separate the precious metal from worthless ore tailings.

In the process, the miners might be poisoning themselves and the environment with mercury. Untreated mercury washes into rivers from thousands of mining sluices. And as part of the refining process, the mixture of gold and mercury is heated, releasing toxic mercury fumes directly into the atmosphere.

Mizzou water researcher Tom Clevenger is helping Brazilian scientists get a handle on the extent of the pollution. Clevenger, associate professor of civil engineering, also is director of the Missouri Water Resources Research Center at MU. During several trips

to the city of Belem, Clevenger has trained Brazilian scientists at the Federal University of Para in the latest methods of detecting water pollution.

So what is happening to the mercury released into the environment from gold mining? "That's the key question," Clevenger says. "Nobody knows. So far, I haven't seen any conclusive studies. Most developing countries don't have the kind of facilities available where they can do the necessary analysis."

To meet that need, Clevenger is working on an exchange program that would bring Brazilian water researchers to MU for the training they need. He's also trying to set up a joint laboratory at the Federal University of Para, using outmoded scientific equipment from Mizzou. "This equipment is what we would call almost obsolete, but for what it would be used for in Brazil, it's still functional," he says.

Clevenger accepts that for a population living in poverty, environmental concerns might not be the first priority. "The key is to use the natural resources for the good of the economy, and at the same time to minimize

the environmental damage to an acceptable point," he says. "It's a difficult decision to make, but if we don't protect the environment, the damage is irreversible."

LABORATORY FOR FERTILITY AND CRYOBIOLOGY

The laboratory is seeking semen donors for its sperm bank program. The program is confidential and all donors will be compensated.

As a potential donor, you will undergo non-invasive screening procedures to insure good health and fertility potential. You must be between the ages of 20 and 40. If you are interested, call 882-7199.

MINORITIES ARE NEEDED

CLASSIFIEDS

FOR SALE

WALNUT CHINA HUTCH with glass doors, two drawers and storage, \$225 (price negotiable). Wood-framed mirror, 40"x25", \$20. Call 443-0879; ask for Jim.

TWO 2-BEDROOM apartments (separate or combined). Convenient location for faculty/staff — College Avenue across from campus. Central air, private parking, laundry in basement. Reasonable price, low upkeep. 446-0012, evenings.

WANTED

MATURE, MARRIED professional couple desires to housesit in a home in Columbia. Have our own home at the Lake. 443-4955 after 6 p.m. 1-365-3551 weekends.

NEW MU FACULTY member seeking rental of a two-to-three-bedroom furnished or unfurnished house near campus beginning July 1991. Call Dr. Sharon Welch at (508) 281-1783, or write 876R Washington St., Gloucester, Mass. 01930.

MISCELLANEOUS

THANK YOU to all my friends at MU for all the wonderful comments, wishes and gifts. It has been a pleasure working here, and I take many beautiful memories with me as I leave MIZZOU. —Linda Converse.

The Classified Advertising Section is open only to faculty and staff members and retirees. A home phone number is required in all classified ads.

Ads must be typed.

Rates: 30-word maximum \$3.

Publication deadlines:

April 26 for May 7 issue

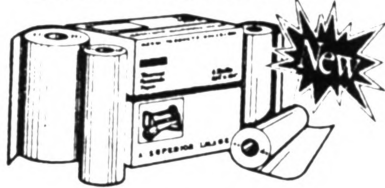
May 31 for June 11 issue

Mizzou Weekly Classifieds: Make your check payable to University of Missouri and send to: Mizzou Weekly, 1100 University Place, Attention: Michelle Burke.

**Semen Donors
Wanted**

GET THE FAX!

NCR brand extra-sensitive thermal FAX PAPER and Post-It FAX MEMOS



Available in 3 sizes:

#0230 \$14.81/CS
99' length, 7/16" core

#0231 \$22.45/CS
164' length, 1" core

#0232 \$41.52/CS
328' length, 1" core

(1 CASE = 6 ROLLS)

| | | | |
|----------------------|---------|--------------|--|
| FAX TRANSMITTAL MEMO | | | |
| TO: | FILE #: | NO. OF PAGES | |
| FROM: | PHONE: | | |
| CD: | FAX #: | | |

Fax Transmittal Memo:
Self-adhesive, 4 x 1 1/2"
No need for cover sheet

#0235 \$4.78/PKG
(50 notes/pad, 12 pads/pkg)

GENERAL STORES

ONLY 2 MORE CHANCES
THIS SEMESTER TO

Reach 11,000
Mizzou Faculty,
Staff and Retirees

with your message, product,
service or special event —
place an ad in *Mizzou Weekly!*

Rates:
Open rate: \$6.05 per column inch.
(1 column = 14.5 picas)
Frequency discount: \$5.05 per
column inch. Call for details.

Publication deadlines:

April 23 for April 30 issue
April 30 for May 7 issue

Mizzou Weekly: A great way
to get results! Call Michelle Burke
at 882-7358 and reserve your
space today!

Life begins at 45

M YOU

In class, Professor Guy Schupp can explain to his students the laws of physics that are applicable to a tennis game. Outside of class, Schupp can demonstrate those principles to his opponents as an ace tennis player.

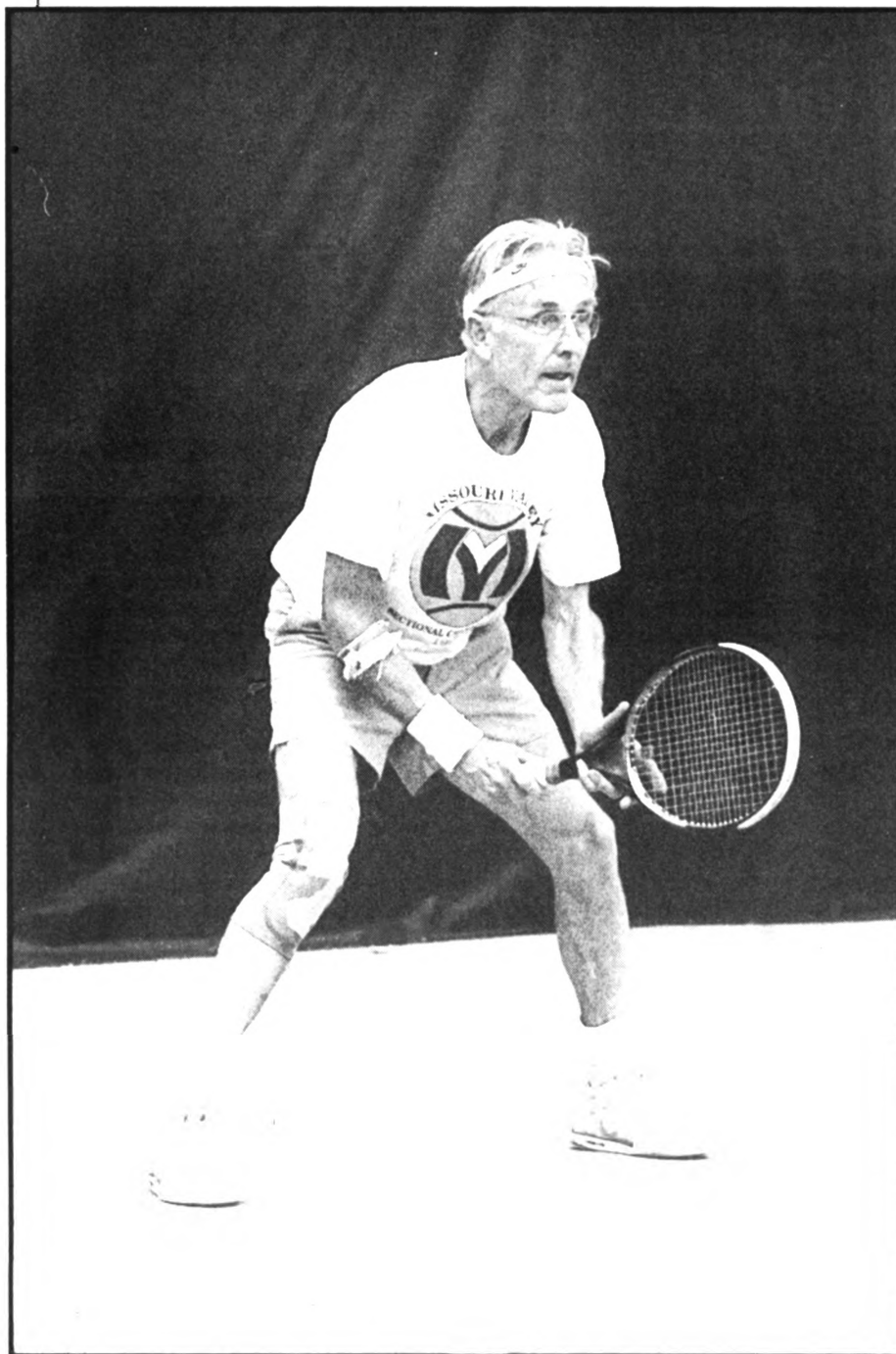
Schupp began his tennis career at Iowa State University, while doing his doctoral work under Professor Erling Jensen. At that time, Jensen was the leader in the age 45-and-up category for the Missouri Valley Tennis Association that includes Iowa, Missouri, Kansas, Nebraska and Oklahoma.

In 1964 Schupp came to MU, where he began teaching physics and continued playing in tournaments. At age 44, he decided to enter the Missouri Valley Tennis Association's tournament in Kansas City in order to practice for the 45-and-

up category the following year. But Schupp did more than gain experience — he won the tournament and has been winning tournaments since.

Several titles, national rankings and more than 100 trophies later, the 57-year-old professor is still playing competitive tennis. "It's a game and it's a good way of staying in shape," says Schupp, who believes younger players burn out because they put too much emphasis on winning and forget to enjoy themselves.

"Tennis is still fun for me," he says. And as far as the importance of winning, Schupp says "once you get to be age 45 and up, anyone who gets out on the court is a winner." — *Story and photo by Tammy Sickal*



Guy Schupp awaits the serve of Skip Walther during a noontime tennis game at Club Woodrill.

Q&A

Q. Sometimes there are some very loud steam-sounding noises coming from MU's power plant. What is it? Is it safe? Are these scheduled?

A. The loud noises are exactly what you describe: the sound of steam escaping from the power plant as part of the routine operation, says Phil Shocklee, assistant director of

Campus Facilities. The noise of steam being vented occurs in several different situations. For instance, a very loud sound of steam escaping that continues for a few minutes is the result of a safety valve releasing excessive boiler pressure to the atmosphere. A second situation, which lasts for several hours, is the muted sound of steam escaping during the process of warming up a boiler for service. A third situation is a muted hollow sound which lasts for about an hour and is part of the process of putting a steam turbine generator on-line. All these situations are part of the normal operation of the power plant and present no safety risk, Shocklee says.

M I Z Z O U PEOPLE

Stevie Hoffman and **Linnea Lilja**, professor and associate professor, respectively, of curriculum and instruction, had "The Power of Storybook Reading: Influencing Oral and Written Language Learning" published in the fall 1990 issue of *Missouri Reader*.

Candace Holdt and **Gail Gates**, assistant professors of human nutrition and foods, received \$13,766 from the Missouri Beef Industry Council to conduct research on physicians' knowledge and attitudes about beef.

Julie Hughes, assistant professor of higher and adult education and foundations, presented "Teaching Theories of Community College Faculty" in Portland, Ore., at the Association for the Study of Higher Education.

Reuben Key was selected Staff Member of the Month for February by University Hospital and Clinics, where he is a cook.

John Lankford, professor of history, attended the American Astronomical Society meeting in January in Philadelphia, where he became chairman of the historical astronomy division. The first historian to head the division in its 10-year history, Lankford will serve until 1993.

R. Lee Lyman, associate professor of anthropology, had "Prehistory of the Oregon Coast: The Effects of Excavation Strategies and Assemblage Size on Archaeological Inquiry" published by Academic Press. His paper, "Late Quaternary Biogeography of the Pygmy Rabbit (*Brachylagus idahoensis*) in Eastern Washington," has been published in the *Journal of Mammalogy*.

Emma Jean McKinin and **Mary Ellen Sievert**, associate professors of information science, were featured in Marydee Ojala's column, "The Dollar Sign," in the August issue of *Database*.

Alexander Meduna, assistant professor of computer science, had two referred journal articles published in 1990. One was "Generalized Forbidding Grammars" in *Intern. J. Computer Math*. The other was "Context Free Derivations on Word Monoids" in *Acta Informatica*. His article, "Global Context Conditional Grammars," has been published in *J. Inform. Process. Cybern.*

Ed Metzen, professor of family economics and management, participated in the annual meeting of NCR-52, Family Economics, in October at the University of Wisconsin. He and **Barbara Slusher**, assistant professor of family economics and management, attended the Second International Conference on Research in the Consumer Interest in Snowbird, Utah. Slusher presented research on "Consumer Acceptance of Food Production Innovations: An Empirical Focus on Biotechnology and BST," and Metzen served on a panel that discussed the future of consumer policy research.

W.R. Miller, dean and professor of education, has begun a three-year term on the board of directors of the American Association of Colleges for Teacher Education.

Clifford Mongler, research engineer tech I in agricultural engineering, received the College of Agriculture Staff Recognition Award for February.

Charles G. Nauert Jr., professor of history, presented "Erasmus and His Universities" in December at the American Historical Association's annual convention in New York.

Michael Patton, professor and chairman of educational and counseling psychology, is president of Division 17 of Counseling Psychology of the American Psychological Association.

Kim Penton, interior design coordinator and interim architectural project manager, was selected Employee of the Month for February by Campus Facilities.

Michael C. Perry, professor and chairman of medicine, was chosen by the American Society of Clinical Oncology to serve as editor of *Proceedings* from 1991-96. In Bethesda, Md., Perry participated in the National Cancer Institute Workshop on Cancer Pain.

Michael Pullis, associate professor of special education, had "Practical Considerations of Excluding Conduct Disordered Children: An Empirical Analysis" accepted for publication in *Behavioral Disorders*. He presented "Multicultural Issues in the Identification of Students with Emotional/Behavioral Problems" in Houston at the annual meeting of the Texas Educational Diagnosticians' Conference.

Loren Reid, professor emeritus of communication, has written a book, *Speech Teacher: A Random Narrative*, which was published by the Speech Communication Association as a feature of its diamond anniversary. Reid narrates his experiences as a classroom teacher, beginning in 1935 — when the speech and theater staff was part of the English Department at MU — and later when the national office of the association was in Switzer Hall.

Robert Reys, professor, and **Barbara Reys**, associate research professor, co-wrote "Computational Estimation Performance Strategies Used by Fifth and Eight Grade Japanese Students," which was published in the January issue of *Journal for Research in Mathematics Education*. In November they made a presentation to the Japanese Society for Research in Mathematics Education at a meeting in Okazaki, Japan.

Q. Scott Ringenberg, assistant professor of hematology and oncology, and **Donald C. Doll**, associate professor, co-wrote "Acute Nonlymphocytic Leukemia: The First 48 Hours," which was published in the August edition of the *Southern Medical Journal*.

Richard Robinson, professor of curriculum and instruction, presented "Chaos: A Possible New Paradigm for Reading Research" and co-presented "Concurrent Validity of the MEAP Comprehension Subtest" at the annual meeting of the National Reading Conference.

Karen Sayre, senior secretary in the Experiment Station Chemical Lab, received the College of Agriculture Staff Recognition Award for March.

Charles D. Schmitz, assistant dean and professor of educational and counseling psychology, has been appointed to the Missouri Advisory Council for Certification of Educators, which advises the state's commissioner of education and board of education on matters related to licensing and certification of teachers, administrators and counselors.

Adolf E. Schroeder, professor emeritus of German, received one of the first three Acorn Awards in February from the Missouri Humanities Council, an arm of the National Endowment for the Humanities. The award recognizes exemplary contributions to the enrichment of Missouri's cultural life.

Michael Scott, assistant professor of educational and counseling psychology, presented "Interdisciplinary Team Approach to the Identification and Treatment of Learning Disabilities and Attention-Deficit Disorders" at the annual meeting of the Missouri Learning Disabilities Association in St. Louis.

Eleanor Shaheen, professor of child health, and **Gail Carlson**, assistant professor of continuing medical education, are youth fellows in the Institute for Youth and Family, which is part of the Missouri Youth Initiative, a four-year program funded by a \$3.6 million grant from the Kellogg Foundation. Fellows identify problems and de-

velop programs and services for children in six demonstration communities.

Robert Shaw, professor of educational administration, received the annual Service to Secondary Education Award presented by the Missouri Association of Secondary School Principals. The award recognizes individuals or organizations who have contributed to improving secondary education and the secondary school principalship.

MaryEllen C. Sievert, associate professor of information science, discussed "Scholarly Resources and Library Resources: The Case of Philosophers" at the annual conference of the Missouri Library Association. She participated in a panel discussion on the "Selection of CD-Roms" sponsored by the computer and information technology committee, and was elected to the executive board for a two-year term as member-at-large.

Wendy Sims, assistant professor of curriculum and instruction, is editor of the *Missouri Journal of Research in Music Education*. Her article, "Sound Approaches to Elementary Music Listening," was published in the December issue of *Music Educators Journal*. She presented "Young Children's Concept Acquisition" at the International Society for Music Education World Conference in Helsinki, Finland, where she was elected chairwoman of the Early Childhood Commission for 1990-92. Her research ar-

ticle, "Characteristics of Young Children's Music Concept Discrimination," has been published in *Psychomusicology*.

Bea Smith, dean of human environmental sciences, served as a consultant last fall to the

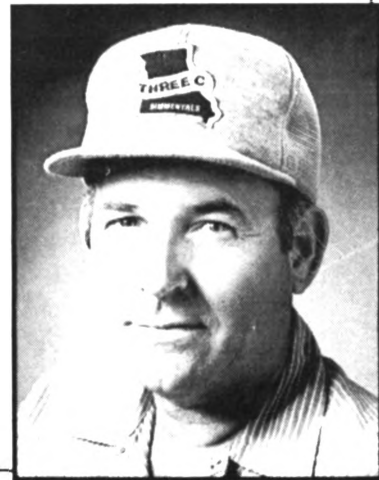
home economics department at Indiana State University in Terre Haute. Smith discussed development, curricular directions, advisory boards and name options with faculty considering changing the department's name.

Congratulations to the College of Agriculture, Food and Natural Resources February Employee of the Month

■ ■ ■
Clifford Mongler
research engineer technician I
Agricultural Engineering

This award is to promote excellence in performance and attitude and to recognize outstanding staff for their service and support of the College, the University of Missouri-Columbia and its mission.

Sponsored in part by Campus Inn
and Buck's Ice Cream.



It all starts with an idea and a blank piece of paper . . .

Building A Better Mizzou

Larry Hubbard says one of the best things about his job is seeing a building design "come to life." As part of Campus Facilities' Project Management team, he coordinates the design phase of many MU construction and renovation projects.

Conscientious and easy to talk to, Larry is an excellent facilitator between MU clients and technical consultants.

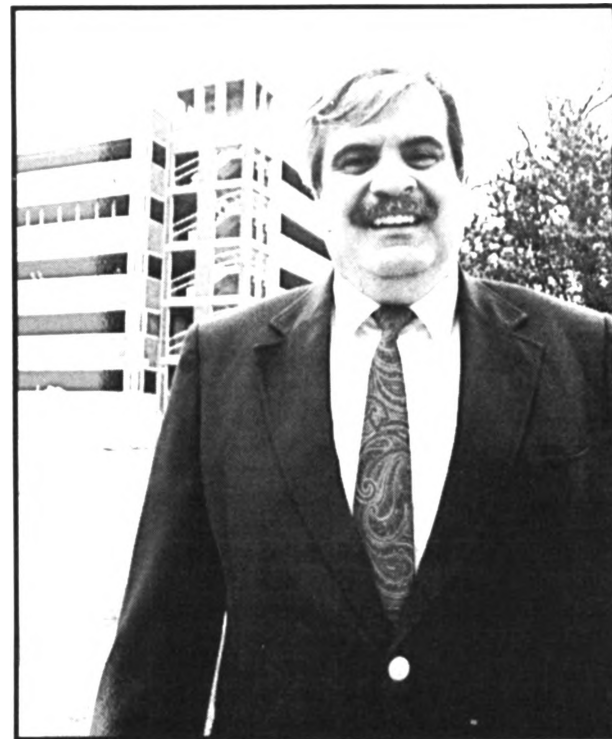
Larry knows if a design is not right, the building won't be right. That's why he spends a lot of time double-checking specifications and drawings.

"MU is a hard owner for consultants to work for," says Larry. "We watch over everybody's shoulder."

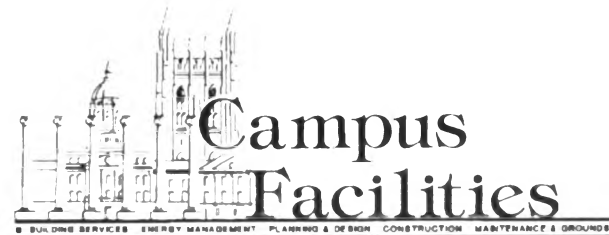
Previously Larry worked for a design consultant, so he "speaks their language." A former lecturer in the Department of Civil Engineering (MSCE '84), Larry understands his client's point of view.

His goal: that MU clients get exactly what they want at a reasonable price.

Experienced and dedicated, Larry is helping build a better Mizzou. We're proud to have him on our Campus Facilities team!



Larry Hubbard, Project Manager for Campus Facilities, at the Turner Avenue Parking Structure. Well on its way to an August completion, the garage will hold 1,300 vehicles.



Congratulations!

Apple Computer Inc., and the Computer Spectrum would like to congratulate the 1991 Mizzou Faculty Award recipients and the winners of the 1991 William T. Kemper Fellowships for Teaching Excellence.

Apple continues to see the educational market as its most important. Congratulations to all winners and recipients!

**COMPUTER
SPECTRUM**

T.A. Brady Commons, University of Missouri, (314) 882-2131



The power to be your best.

THE GENERAL EDUCATION ARCHITECTURE

Approved by unanimous vote of the Task Force on General Education, Feb. 28, 1989;
amended Sept. 25, 1989, to include recommendations of the Mathematics Task Force.

Description and Rationale

Contents:

I. Statement of Principles

II. Proficiencies Required

- A. Composition
- B. Mathematics
- C. Computing and Information Literacy

III. Modes of Instruction

- A. Writing Intensive Experience
- B. The Undergraduate Seminar
- C. The Capstone Experience
- D. Physical/Biological Science Lab Experience

IV. Distribution of Content-Knowledge

- A. Social and Behavioral Science
- B. Physical and Biological Science
- C. Humanistic Studies and Fine Arts

V. Summary of Specific Elements

I. STATEMENT OF PRINCIPLES

Committees of the University of Missouri-Columbia faculty have been considering the issue of general education for the past three years. The Task Force on Basic Skills (1986-1987) examined national trends in general education and evaluated the curricular reform experiences of other universities against the institutional history and the diverse mission of MU. The Task Force on General Education (1987-1988) pursued a similar line of inquiry. After its review of documents, the committee conferred with unit deans and directors and representatives of the Department of Elementary and Secondary Education. An early draft of the committee's recommendations was made available to the faculty, and a series of open forums was held to elicit faculty response.

Based on what has been learned over the past several years, the Task Force on General Education (1987-1989) has developed a revised plan for a general education curriculum at MU. The design is based on the following principles:

1. To provide students with a sound undergraduate education, the University must equip them with the skills, knowledge, and dispositions required of informed citizens. University graduates must be able to grasp the meaning of problems that go well beyond their academic major, and they must accept the burden of responsibility given to them as the well-educated leaders of society.
2. To be well-educated does not mean that every student needs to follow the same program of instruction. The University of Missouri offers a rich array of courses that could be used to satisfy the general education requirement proposed here, and the committee assumes that additional courses will be developed as they are needed. Although the committee agrees that the current "smorgasbord approach" to curriculum, criticized in earlier reports, fails to serve students adequately, the committee believes that the remedy of a core curriculum would be inappropriate for the campus.
3. It is also assumed by the committee that recommendations reported here represent minimum requirements. Individual units and departments may wish to require more extensive coursework in general education.
4. The committee believes that the general education, recommended in this report, should apply to all undergraduates at MU, independent of major.
5. The general education curriculum should be designed to develop student proficiencies in the areas of writing, mathematics, and computing and information literacy, and the curriculum should emphasize the processes of instruction as well as the ways in which students are asked to think about subject matter.
6. Through its general education curriculum, MU should require all students to examine the nature of knowledge and the modes of inquiry used in the social and behavioral sciences, in the physical and biological sciences, and in the humanities and fine arts.

The General Education Architecture has been designed to reflect these principles. The committee regards these recommendations as a point of departure, the beginning of a process for the regular deliberation of issues central to the education of undergraduates. The committee hopes that the curriculum will continue to evolve, reflecting the best efforts of the faculty and the highest ideals of the University. Toward this end, the Task Force recommends the establishment of a new campus-wide faculty committee, the Committee on Undergraduate Education, for the continued consideration of issues central to undergraduate education.

COMMITTEE ON UNDERGRADUATE EDUCATION

The Committee on Undergraduate Education shall have responsibility for the implementation of the campus-wide general education program. This responsibility includes the coordination of general education, approval of courses, clusters, capstones, and undergraduate seminars to meet the undergraduate general education requirements. The committee should work with schools, colleges, departments, the Campus Writing Board, and other committees including the Math Task Force, in making the architecture outlined in this report a reality.

The Committee on Undergraduate Education will be made up of elected representatives of 11 undergraduate units: (1) Agriculture, Food and Natural Resources, (2) Arts and Science, (3) Business and Public Administration, (4) Education, (5) Engineering, (6) Health Related Professions, (7) Human Environmental Sciences, (8) Journalism, (9) Library and Informational Science, (10) Natural Resources and (11) Nursing.

Much of the work of the proposed committee concerns the nature of course clusters in Humanistic Studies and the Arts, the Social and Behavioral Sciences, and the Physical and Biological Sciences. Therefore, the College of Arts and Science should be disproportionately represented on the Committee on Undergraduate Education. Arts and Science should have six representatives to the committee, with one each from Humanities, the Arts, Social Science, Behavioral Science, Physical Science, and Biological Science.

Invitations for ex-officio membership on the committee should be extended to representatives of the Campus Writing Board, the Math Task Force, the Honors College, the Faculty Council, the Associate Dean of Arts and Science, and the Vice Provost for Instruction (whose office will provide administrative support).

II. THE PROFICIENCIES

Introduction to section

This section of the report focuses on the variety of proficiencies or skills that students should acquire. The committee believes that college graduates should demonstrate proficiencies in composition, mathematics, and computing and information literacy. The committee recommends campus-wide requirements in these areas, and the creation of a task force to study the desirability of a foreign language proficiency requirement. Because these areas are seen as proficiencies, the committee recognizes that some students will be able to demonstrate competence upon entry to the University while others will require several courses in a particular area to reach the required level of skill. The committee does not intend that these recommendations be viewed as credit-hour requirements if a student can demonstrate the appropriate level of competence.

A. Composition

RATIONALE

Writing is not only a way to record and report information, it is a way to discover knowledge. To write clearly, simply, directly, and in a vocabulary and syntax appropriate to the various disciplines demands the ability to listen, to observe, to comprehend, to correlate seemingly disparate ideas, and finally to give voice to the thoughts they produce.

Writing is an act of composition, of putting together ideas. When we write, we make choices. We sort through myriad fragments of thought, sensations, memories, and emotions that have registered in our minds. We organize these to produce a pattern of expression and attempt to reveal that

pattern to an audience that will, in turn, examine the pattern in terms of its own dictionary of thought, sensations, memories and emotions.

If we possess the ability to express ourselves effectively and systematically on paper, we take advantage of a trait that is uniquely human: the ability to inform, persuade, and move to establish discourse and communication with others from whom we may learn.

Thus, writing is also a way of learning and of knowing, not just in order to be able to tell others, but in order to effect self-understanding. If we lack the ability to write clearly, our thoughts remain uncomposed, disjointed, and essentially meaningless to ourselves as well as to those with whom we wish to communicate.

PROPOSED REQUIREMENT

Every undergraduate should be required to complete English 20 (Exposition and Argumentation) plus two courses designated as "writing intensive."

B. Mathematics

RATIONALE

Knowledge of mathematics is an essential component of university education. Since ancient times, logic and geometry have been included in the curriculum of those considered well-educated. Today, the need for the study of mathematics has never been greater. Mathematics is the language used to express scientific understanding of the natural world. Educated citizens cannot avoid a quantitative confrontation with their environment.

Mathematics education at the university level requires adequate pre-college preparation. The typical course of study for students planning to attend college should include four years of mathematics, including elementary algebra, geometry, trigonometry, and intermediate algebra or mathematical analysis.

A student completing this sequence should be well prepared for a first course in college mathematics. Traditionally, this course has been the calculus, but it might also be a course in statistics, finite mathematics, discrete mathematics, mathematics of finance, or some other discipline-specific course in mathematics built upon the knowledge gained in a strong high school mathematics program or in Math 10.

These college courses should show how mathematics can be used to help understand some natural law and how mathematics can be used to solve some real world problems. This minimum proficiency in mathematics is required for a university education. Of course, since not all students will start their university education fully prepared, the university will continue to offer courses below this level. However, preparatory courses will not be allowed to substitute for at least one experience in college-level mathematics. The university degree must be an extension of, not a substitute for, the secondary school curriculum.

PROPOSED REQUIREMENT

Every undergraduate should demonstrate competency in College Algebra (currently Math 10) or above. Students may satisfy this requirement by 1) completing an appropriate Math course, 2) completing a Mathematics course requiring Math 10 as a prerequisite, or 3) passing a test that demonstrates proficiency in the content of Math 10.

Each undergraduate should complete a quantitative proficiency requirement that applies mathematical skills or reasoning to particular areas of disciplinary interest. Each course meeting this requirement will have the completion of Math 10 as a meaningful prerequisite.

NOTE: The Task Force on General Education adopted the recommendations of the Mathematics Literacy Task Force Final Report issued August, 1989. Further explanation of the above may be found in the full report issued by that group.

C. Computing and Information Literacy

RATIONALE

As society moves from the industrial period to the information age, more people will become involved, both personally and professionally, with those tasks relating to the collection, processing and management of information. Much of this work will involve the transmission of information to and from various electronic devices, in particular, computers.

Computers have thousands of applications in modern society, and they have become indispensable tools with a wide range of personal, academic, and business applications. The versatility of the computer has been convincingly demonstrated in a wide variety of tasks.

Current studies indicate that as many as 9 out of 10 newly created positions are involved in information transfer, and that this trend is likely to continue.

Undergraduates need basic information literacy to assist them with their studies. Examples include word processing to facilitate writing; programs to permit analytical and problem solving work in accounting, engineering, and other disciplines; and database searching to allow students access to the full range of the library and related information resources.

Prospective employers expect graduates to possess basic skills in using information in print and electronic formats. This expectation may be more important for some career tracks than for others, but increasing numbers of organizations have come to expect that a basic college education includes significant work with computers and other information resources.

The use of the computer as a tool for accessing data, coupled with the phenomenal growth of information, signals a need for basic skill development in computing and information literacy as a critical component of undergraduate education.

PROPOSED REQUIREMENT

MU must provide all undergraduates with computing and information literacy. A basic proficiency could be achieved through one of the avenues listed below.

A) A series of modules is suggested, some of which may be offered as self-paced courses. The modules should include some of the following:

1. General introduction to computers in society.
2. Skills associated with application packages, e.g. word processors, spreadsheets and database management systems.
3. Problem solving skills using a programming language such as BASIC.
4. Ability to access information in both print and electronic formats.

OR

B) A regular 3 hour course that incorporates elements listed above.

OR

C) Computer and information literacy demonstrated through written and/or hands-on work.

Foreign Language

The committee believes that a foreign language requirement for all undergraduates, regardless of academic major, would be desirable. The command of a foreign language enables students to be more effective actors in an increasingly interdependent global environment. In addition, a foreign language helps student reach new levels of awareness of other peoples and cultures. However, the campus community seems to be unwilling to endorse a campus-wide language requirement without further examination.

Therefore, the committee recommends that the Committee on Undergraduate Education appoint a task force on foreign language instruction to examine, among other issues, 1) the likely benefits to be derived from a language requirement; 2) the level of foreign language proficiency to be required; 3) the likely costs of such a requirement; and 4) the impact on existing programs.

III. MODES OF INSTRUCTION

Introduction to section

This section of the report focuses on the processes of teaching and learning. The committee believes that the quality of the undergraduate experience is affected not only by the content of courses but by the methods of instruction and the ways in which students are asked to think about and apply subject matter. The items in this section, Writing Intensive Courses, The Undergraduate Seminar, The Capstone Experience, and The Physical/Biological Sciences Labor Experience course address four forms of instruction.

A. Writing Intensive Courses

RATIONALE

MU's writing intensive courses use writing as a tool for learning. They require students to express, reformulate, and apply concepts of an academic discipline. The emphasis on writing is not intended primarily to give students additional practice in basic composition skills, but to encourage students to think more clearly and express their thoughts

more precisely.

Revision is the heart of a writing intensive course. Instructors in writing intensive courses typically assign some papers so demanding that few students will do a completely satisfactory job in a single draft. The first draft then becomes a testing ground for the student's ideas, and the professor's comments on the draft are an integral part of instruction. The revision process exposes students to "live" questions in an academic discipline, and allows students and professors the opportunity to work together in an attempt to make sense of any area of learning. (From: "Guidelines for Writing Intensive Courses," Director, Campus Writing Program.)

PROPOSED REQUIREMENT

Students must take two "writing intensive" courses after completion of English 20. One course must be selected from the upper division courses in the student's major. Writing intensive courses may be used to satisfy other curricular requirements as appropriate. Writing intensive courses must be taught by full-time faculty members.

B. The Undergraduate Seminar

RATIONALE

Reasoning, critical thinking, writing and oral communication are at the heart of the educational process. The committee agrees that,

To reason well, to recognize when reason and evidence are not enough, to discover the legitimacy of intuition, to subject inert data to the probing analysis of the mind these are the primary experiences required of the undergraduate course of study. There is not a subject taught nor a discipline entrenched in the curriculum that should fail to provide students with a continuing practice in thinking of the kind we here discuss. Probably most of us, inside and outside the academic community, assume that if anything is paid attention to in our colleges and universities, thinking must be it. *Integrity in the College Curriculum: A Report to the Academic Community* 15, 16. (Association of American Colleges, February 1985).

Although all university courses may assist in the development of these skills, courses should be developed in all disciplines that place particular emphasis upon these processes. Among the characteristics of such courses would be limited class size, readings, written or oral assignments that focus on some aspect of critical thinking, and feedback to the student.

Critical thinking is central to undergraduate education for several reasons. It enables students to acquire knowledge and make use of knowledge by asking significant questions. It permits the analysis of conflicts, and it encourages the development of problem-solving and decision-making skills. Critical thinking often involves the ability to comprehend a position or argument that is alien to the thinker and to move beyond the view that there is a single correct answer to every question.

Courses in various disciplines should expose students to different kinds of reasoning and require them to examine the reasoning in various texts to determine whether the premises support the conclusions reached. Students must be required to examine the justifications for viewpoints they do not share and develop both written and oral arguments to support their own views.

Among the goals of the undergraduate seminar would be development of students' ability to:

- 1) pose worthwhile questions
- 2) evaluate the adequacy of an argument, position, or viewpoint
- 3) distinguish among facts, inferences, and opinions
- 4) explain a complex proposition without adding to its complexity
- 5) derive meaning from evidence
- 6) synthesize large quantities of information
- 7) understand the difference between unverified assertions and those based on critical analysis
- 8) understand the difference between various types of reasoning
- 9) conceptualize and organize thoughts
- 10) evaluate a particular topic critically and to express these critical evaluations orally

The undergraduate seminar should be designed to facilitate an exchange of ideas that will help students broaden their overall knowledge. Such an experience can also aid in developing the student's ability to evaluate particular topics in a critical fashion. In addition, an undergraduate seminar should also develop the student's ability to organize and present thoughts orally. The seminar experience can add relevance to the undergraduate educational experience and

stimulate students to higher levels of proficiency and scholarly development. A properly designed seminar experience might also challenge and broaden the student's interest beyond the primary area of study.

PROPOSED REQUIREMENT

One undergraduate seminar shall be required during the first 60 hours of the college experience. English 20 shall be the only prerequisite. Class size should be limited to 25 students to facilitate the development of oral communication skills and to encourage exchanges between students and scholars.

The undergraduate seminar may serve as a writing intensive course as well as an introduction to the student's major field. The undergraduate seminar must be taught by a full-time faculty member.

C. The Capstone Experience

RATIONALE

The undergraduate capstone experience is designed to bring reflection and focus to the whole of the college experience. The experience should encourage students to integrate facets of their area of concentration with important concepts from related disciplines.

This culminating college experience should focus on some feature of the student's major and should require disciplined use of skills, methodology, and knowledge taught throughout the undergraduate curricula.

Examples of types of capstone experiences might include (but are not limited to) the following:

1. A senior seminar that requires a major project.
2. An undergraduate thesis.
3. A semester project that culminates in a paper, essay, presentation, or similar product.
4. An internship to investigate a problem in the workplace, and a paper that asks students to reflect on, or evaluate, the experience.
5. A performance, show, or recital appropriate to the discipline.

PROPOSED REQUIREMENT

All undergraduates should enroll in a capstone experience during their senior year. The purpose of this experience is to offer students the opportunity to integrate general knowledge and specific knowledge from a chosen area of concentration.

The capstone experience requirement shall be met through enrollment in a course approved by the Committee on Undergraduate Education as a capstone course. Capstone experiences should ordinarily be selected from within the student's major or minor.

A course or academic experience that fulfills the requirement "capstone experience" should have the following characteristics:

1. The issue for investigation should be identified from within the student's area of concentration, but it should also require the use of knowledge and skills from the liberal arts in order to formulate a satisfactory resolution.
2. The research process used should be appropriate to the student's area of concentration.
3. The teaching-learning modes might include individual or group work, oral reports, written reports, essays, laboratory experiences or any of a variety of methods appropriate to the academic discipline. Both the quality of the product of the student's investigation and the process of presentation should be evaluated.
4. Capstone courses/experiences should be organized so that no teacher has more than 25 students in a class in order to allow for active participation by each student and feedback by the teacher.
5. Capstone courses may serve as writing intensive courses and may serve as assessment vehicles within the departmental program.
6. Capstone courses should be taught by full-time faculty members.

D. The Physical/Biological Science Lab Experience

All undergraduates should complete a laboratory experience in the physical or biological sciences. This requirement is part of the distribution of content-knowledge section outlined under IV B.

IV. DISTRIBUTION OF CONTENT-KNOWLEDGE

Introduction to section

One measure of general education is the configuration of the courses taken outside of the student's major field. Because the number of courses that can reasonably be required in general education is, of necessity, quite limited, the committee believes that these courses should give special attention to the nature of knowledge and the principles of investigation used by researchers and scholars. The content component of a general education curriculum is not the content studied by experts or the courses that will contribute directly to a student's career. It is, instead, the knowledge needed by all students who, as citizens, must make informed judgments about issues that go beyond the narrow areas of their academic specialization.

The committee recommends that General Education courses should be grouped into three areas Humanistic Studies and Fine Arts, Social and Behavioral Sciences, Physical and Biological Sciences and that all students should be required to take two nine hour clusters outside of their major areas. (For example, a chemistry major would take one 9-hour Humanistic Studies and Fine Arts cluster and one 9-hour Social & Behavioral Science cluster.)

The committee recommends the cluster approach because of its promise to provide students with general education coursework that has **coherence, breadth and depth**. A specially designed nine-hour sequence of courses is more likely to provide students with experience that develop these goals than that provided through a serendipitous selection of any three courses.

Coherence: The courses in the cluster should be designed so that they are implicitly connected in some meaningful way. The cluster of courses should be composed of diverse intellectual experiences that allow students to see how the individual courses are integrated into larger patterns of understanding. The clusters might examine phenomena from different perspectives (e.g., a cluster entitled the "American Experience" might be composed of courses in history, political science, and women's studies. Or, a cluster on the "Environment" could include courses from biology, atmospheric science, and natural resources). A cluster could also be made up of a sequence which investigates portions of the same canon (e.g., the Humanities sequence in the Honors College).

Breadth: No one department can be expected to offer courses that represent the fullness and richness of the field. To convey a better sense of the Humanistic Studies and Fine Arts, the Social and Behavioral Sciences, and the Physical and Biological Sciences, each cluster should be multi-disciplinary, composed of courses from at least two departments.

Depth: Intermediate or advanced courses provide students with experience in the ways knowledge is acquired and used in the field. At least one course in the cluster should be an intermediate or upper level course that builds on the academic foundation established in the two introductory courses.

Examples of Clusters: The committee has constructed the following example to illustrate the cluster concept. We have specifically used fictional courses:

Cluster Title: **The American Experience**

Intro Course: The Foundations of the US Economy

Intro Course: The Foundations of the US Political System

Intermediate Courses: Women in Politics

Education and American Values

Vietnam and American Society

Afro-Americans in the 20th Century

American Capitalism

The US Election Process

The cluster would be constructed using two introductory courses (departments would be limited to two offerings that fill the introductory part of general education clusters). A student could choose from a limited number (no more than six per cluster) of intermediate or advanced courses to build on the introductory courses. No limits would be placed on departmental offerings of these intermediate or advanced courses.

Development of Clusters

1. The committee believes that department chairs should initiate the process of designing and proposing clusters.
2. Proposed clusters should be submitted to the campus Committee on Undergraduate Education for review and approval. That committee will develop guidelines for clusters and assist department chairs and the faculty in developing approvable clusters.
3. The committee believes that in order to provide students with a coherent general education curriculum with appro-

priate breath and depth, the number of clusters should be limited. To encourage the greatest campus-wide participation in general education, each department should be limited to offering two introductory courses that can be used as part of a general education cluster.

Cluster criteria

The committee believes that the Committee on Undergraduate Education should establish criteria for the approval of clusters, and that those criteria should include sets of learner outcomes. The following outcomes are offered to the Committee on Undergraduate Education as suggestions for their consideration:

A. Social and Behavioral Sciences

The committee recommends that each cluster include courses from both the social science and the behavioral sciences. In addition to meeting the specific objectives for each course, after completing a nine hour cluster a student should be able to:

a. Take an experiment/investigation reported in the popular press and examine the extent to which it reflects the methods of social or behavioral science, the ethics of inquiry, etc.

b. Examine competing perspectives within disciplines. For example, in the social sciences students could be asked to examine both functionalists and conflict theorists, positivists and poststructuralists. In the behavioral sciences, student could look at the assumptions that support both quantitative and qualitative research or competing explanations of behavior.

c. Examine the nature of civic responsibility, issues of social justice, and the continued evolution of democratic processes.

B. Physical and Biological Sciences

The committee recommends that each cluster include courses from both the physical sciences and the biological sciences and one lab course.

In addition to meeting the specific objectives for each course, after completing a cluster in the Physical and Biological Sciences, students should be able to:

a. Apply the scientific method to real world problems, specifically:

- 1) recognizing what is and what is not a scientific problem in the physical and biological sciences
- 2) asking critical questions
- 3) developing working hypotheses
- 4) designing appropriate experiments to gather data
- 5) using appropriate quantitative skills to analyze, interpret, and evaluate data
- 6) developing reasonable conclusions and applying them to new situations

b. Take an experiment/investigation reported in the popular press, and explain the extent to which it reflects the methods of science, the ethics of scientific inquiry, etc.

C. Humanistic Studies and Fine Arts

The committee recommends that each cluster include courses from both Humanistic Studies and Fine Arts. In addition to meeting the specific objectives for each course, after completing the nine hours of coursework in a cluster, a student should be able to:

- a. Understand the development of the Western tradition (in history, literature, art, music, philosophy, etc.)
- b. Examine the nature of research in the humanities and the arts.
- c. Understand the impact of non-Western nations, women, and minorities on the cultural traditions of the U.S. and the world, and examine the positions taken by those who attack the canon (in literature, history, music, etc.)
- d. Demonstrate an understanding of the creative and artistic processes.
- e. Interpret and evaluate artistic expression.
- f. Become more sensitive to the implications of the arts and the humanities for the life of the individual.
- g. Develop an understanding of ethical principles in the arts and the humanities.
- h. Develop an understanding of the institutions and ideas of our shared humanity.

V: SUMMARY OF SPECIFIC ELEMENTS

A. Proficiencies

1. Students must complete English 20 during the freshman year (and prior to enrolling in writing intensive courses or the undergraduate seminar);
2. Students must demonstrate competency in mathematics at the Math 10 level and subsequently complete a "quantitative proficiency" requirement.
3. Students must demonstrate computing and information literacy through course work or by demonstrated/hands-on proficiency.
4. The Committee on Undergraduate Education should appoint a task force to examine the desirability of requiring a campus-wide foreign language proficiency.

B. The Modes of Instruction

1. Students must complete two "writing intensive" courses subsequent to taking English 20;
2. Students must complete one "Undergraduate Seminar" (focus on reasoning, critical thinking, writing and oral communication).
3. Students must complete a "Capstone Experience" course during their senior year;
4. Students must complete a laboratory experience in the physical or biological sciences.

C. Distribution of Content/Knowledge

18 hours total

Students must successfully complete two clusters selected from outside the general disciplinary field of their major.

NOTE: The committee strongly recommends that courses in the Humanistic Studies and Fine Arts Clusters and the Social and Behavioral Sciences Clusters be designed to emphasize multicultural and international experiences and to satisfy the State of Missouri's requirement for instruction in the Constitution and American History.

It is also recommended that clusters include one approvable writing intensive course, where possible.

Members of the General Education Task Force

Barbara Biehler

School of Nursing

Paul Braisted

College of Engineering

Bob Breitenbach

Division of Biological Sciences

Carmen Chicone

Department of Mathematics

Jeff Chinn (Ex Officio)

Vice Provost for Instruction

Francis J. Flood

School of Library and Informational Science

Harold E. Garrett

The School of Natural Resources

Sandra Gautt (Vice-Chairwoman)

Department of Special Education

Brent Jones

Department of Veterinary Medicine and Surgery

Earl Lundgren

Department of Management

Peter Markie, Faculty Council Liaison

Department of Philosophy

Stuart Palonsky (Chairman)

Department of Curriculum and Instruction

Michael Prewitt

School of Health Related Professions

Byron Scott

School of Journalism

Wendy Sims

Department of Music

David Slepner

Department of Agronomy

Ted Tarkow (Ex Officio)

Associate Dean

College of Arts & Science

Randy Vessell

Department of Parks, Recreation and Tourism

Robert Weagley

Department of Family Economics and Management

James Westbrook

School of Law

A.J. Schnack, President, MSA

Implementation Committee of the General Education Task Force

Final Report - February 28, 1991

Faculty Council established this committee in FS 1990. Its charge was to review the General Education Architecture approved in September 1989 by the Task Force on General Education with a view toward establishing a time frame and sequence for implementation of the requirements called for in the document and a realistic budget for these requirements.

The committee has met regularly, often on a weekly basis, since its inception and has reviewed, discussed, and investigated all aspects of the General Education plan. Sub-committees looked into specific recommendations of the plan and sought the advice of deans of instruction in those colleges and department chairs of those departments most immediately affected by requirements.

The individual items of the General Education plan which we investigated were: (1) the Mathematics requirement as developed by the Math Proficiency Task Force and adopted by the General Education Task Force, (2) the Lab Science requirement, (3) the Second Writing Intensive requirement, (4) the Undergraduate Seminar, (5) the Capstone Experience, (6) Course Clusters, and (7) items which are already in place, such as Composition and, to a certain extent, Computing and Information Literacy.

1. Mathematics Requirements

The committee endorses the recommendations of the Mathematics Literacy Task Force as presented to the Provost in August 1989. The General Education Document mandates proficiency at the Math 10, College Algebra, level across the curriculum. Most students currently meet this requirement. Additional demand for this course, particularly after the 1991 increase of admission standards, will be very small. The report of the Math Task Force further mandates a quantitative proficiency requirement for all baccalaureate degree candidates at MU, i.e., in addition to Math 10. This requirement might be seen as the application of mathematical skills or reasoning to particular areas of disciplinary interest. The requirement could be fulfilled within various subject areas, including statistics, the social and natural sciences, etc. The cost of implementing the recommendations of the Math Task Force would be modest: the Math 10 requirement is already satisfied by a majority of students on campus, either by coursework or by proficiency. Requiring Math 10 competence of all students would involve no more than 12-15 additional sections costing a maximum of \$60,000. Additional funding will be needed for Math support activities, budgeted at \$40,000. The quantitative proficiency requirement will involve faculty development, TA support, and some smaller sections. An estimated cost of \$150,000 is included for the quantitative proficiency requirement.

2. The Lab Science requirement

This requirement is already met by most students. Some limited redefinition of "Lab" is required by the General Education Document, particularly in reference to General Psychology 2. There would be some additional demand created by pre-business students and pre-journalism students, who take Gen. Psych., and by students in the General Studies Program. This demand would involve a total of 300-400 students. We have budgeted \$250,000 for these additional students and the upgrading of general education science clusters.

3. Writing Intensive Experience

MU already requires one WI course of all undergraduates. The new structure would involve a second WI course: in many cases the second one would be in the student's major field. For departments with many majors and for B&PA, some additional WI sections would be necessary. The estimated cost in this category is for TAs to assist faculty. Figures have been checked with the Campus Writing Program and are deemed realistic. Estimated cost: \$160,000.

4. Undergraduate Seminar

The Undergraduate Seminar is the single most costly item in the package. Suitable seminars are already in place or could be easily developed in some units. The objective is that all MU undergraduates would be exposed to a small learning environment (not to exceed 25 students), preferably but not necessarily in their prospective major field, taught by a full-time member of the faculty within their first 60 hours of undergraduate work. Achieving this objective also will require that senior faculty be encouraged to teach lower-

divisional undergraduate courses. Approximately half of MU students already satisfy this requirement. In some areas this course is more easily facilitated than in others and could be achieved without undue financial demand: fields with a modest number of majors see few problems in achieving this goal. In some of these areas, students from adjacent disciplines could also be accommodated, as not all students have chosen their majors within the first 60 hours of coursework. Disciplines with large numbers of majors, such as some of the social sciences and B&PA, would need additional faculty to achieve this requirement. We estimate that sixty additional sections would be required, some reconfigured from already existing courses. The best approximation of additional faculty necessary is 15. At a cost of \$40,000 per faculty member, the estimated cost of this item is \$600,000. We further recommend that the Undergraduate Seminar be the last item to be implemented, which will give departments time to develop such courses and recruit the necessary faculty.

5. Capstone Experience

In most cases, the capstone experience would replace an existing course. In many departments, there are one or more courses already in place which might be restructured (some only slightly) to fulfill this requirement. In some cases, the requirement can also be fulfilled by a senior thesis, a research project, a senior seminar, a semester project or an internship or performance — i.e., the capstone experience need not take the form of a course. Departments in some colleges — particularly B&PA — would require additional faculty. We estimate the number of additional faculty needed at 7.5: at a cost of \$40,000 per faculty member, the approximate total cost would be \$300,000.

6. Cluster Courses

In most areas clusters of courses can be developed from already existing course offerings and will replace existing courses. We have budgeted \$240,000 extra into the plan to devote toward faculty and course development. After the clusters are in place, some of these funds can be reallocated to other areas.

7. Composition and Computing and Information Literacy

Composition (English 20) is already required across the curriculum. There would be no change in current requirements.

Each year students arrive at MU better prepared in Computing and Information Literacy, and this pattern is expected to increase. Students in Engineering and B&PA already have computing proficiency: about 25% of other students also have proficiency. This category involves the design of some modules and some staff time to check proficiency. This requirement can be met within the computer labs and by staff supported by the recently initiated computer fee.

Contingency

The above calculations are estimates based on the best information currently available. The committee recommends that a contingency fund be considered to allow full implementation of all the requirements should the estimates made above fall short in a particular area. We recommend budgeting \$200,000, or just over 10%, in this category.

Implementation

These requirements should become effective with freshmen entering FS 1993.

The Undergraduate Seminar should become effective with freshmen entering FS 1995.

Implementing the requirements with an entering freshmen class results in a 4-5 year phase-in as students progress through the curriculum. Postponing the undergraduate seminar requirement allows more time for the start-up of this item, which is the single most costly item in the general education package. The committee views the undergraduate seminar requirement as a particularly important part of the general education plan and strongly endorses its implementation, in spite of its cost.

Committee

Chairman, Paul F. Casey
German, Russian and Asian Studies
Jeff Chinn
Vice Provost for Instruction
Gregory Casey
Political Science
Robert Combs
Electrical & Computer Engineering
Nancy Fair
Textile & Apparel Management
Robert Harris
Chemistry
George Jesse
Animal Science
Charles Kyriakos
Music
Christopher Lucas
Higher & Adult Education
Roxanne McDaniel
Nursing
Stuart Palonsky
Curriculum & Instruction
M. Gil Porter
English
Mary Sebacher
Health Related Professions
Randy Vessel
Parks, Recreation & Tourism

Implementation of General Education Architecture

BUDGET PHASE-IN

| | | |
|---------------------|----------------------|-----------|
| Year zero: 1991-92 | Planning | |
| Year one: 1992-93 | Math requirement* | \$125,000 |
| | Computing Literacy | no cost |
| | Composition | no cost |
| | Lab Experience | \$125,000 |
| | Cluster development | \$100,000 |
| Year two: 1993-94 | Math requirement | \$125,000 |
| | Lab Experience | \$125,000 |
| | Clusters | \$100,000 |
| Year three: 1994-95 | Undergrad. Seminar** | \$150,000 |
| | Clusters | \$ 40,000 |
| | Writing Intensive | \$ 80,000 |
| | Capstone | \$ 80,000 |
| Year four: 1995-96 | Undergrad. Seminar | \$150,000 |
| | Capstone | \$100,000 |
| | Writing Intensive | \$ 80,000 |
| Year five: 1996-97 | Undergrad. Seminar | \$150,000 |
| | Capstone | \$120,000 |
| Year six: 1997-98 | Undergrad. Seminar | \$150,000 |
| | Contingency | \$200,000 |

*Requirements effective with freshmen entering FS 1993

**Undergraduate Seminar effective with freshmen entering FS 1995

The committee recommends that the plan be phased in at a cost of approximately \$330,000 per year over a period of 6 years.

BUDGET SUMMARY

| | |
|--|-------------|
| Mathematics | \$250,000 |
| Composition | No cost |
| Computing & Information Literacy (computing fee) | No cost |
| Writing Intensive | \$160,000 |
| Science Lab | \$250,000 |
| Undergraduate Seminar | \$600,000 |
| Capstone Experience | \$300,000 |
| Distribution of Content-Knowledge (Funding for faculty development, team-teaching, etc.) | \$240,000 |
| | \$1,800,000 |
| Contingency | \$200,000 |
| Total | \$2,000,000 |

UNCOVERING THE PAST

MU archaeologists reconstruct culture of ancient Roman town on the island of Cyprus.

Marcus Rautman and a handful of Mizzou students are uncovering a mystery on the Mediterranean island of Cyprus. Rautman, an assistant professor of art history and archaeology, is digging into the past at a site called Kopetra on a high ridge along the island's southern coast.

Over the past four summers, the team from MU has discovered a Roman settlement from the 6th and 7th centuries A.D., including the tumble-down walls of residential neighborhoods, an industrial quarter and two small churches. Rautman is investigating the fall of the Roman Empire by trying to reconstruct the culture of the small provincial town that prospered during the transition from the classical world to the Middle Ages.

"This was never a large city with an amphitheater and grand buildings," Rautman says. "We're interested in seeing how cultures change on the level of the

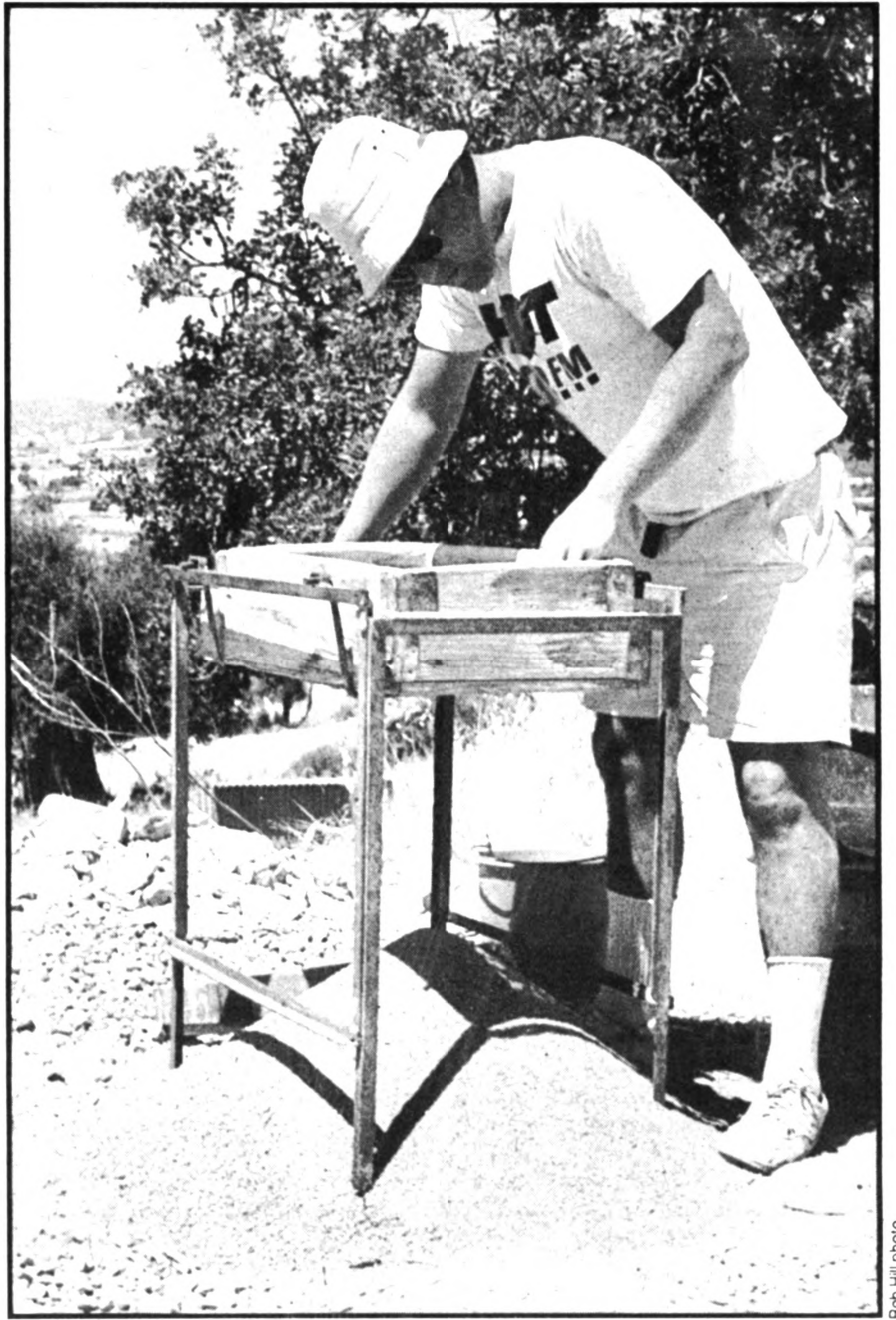
common person. Our site appears to have grown up fairly late. It seems to prosper and then end rather abruptly."

The team from MU stays in a village about a mile from the site. The archaeologists start digging at daybreak, to keep from roasting in the afternoon heat. They carefully sift through the soil, looking for shards of pottery, glassware, metal coins and other artifacts.

Tens of thousands of pottery pieces have been collected and classified. By pinpointing whether the artifacts were produced locally or imported from Egypt or Africa or Syria, archaeologists can trace the ancient Roman trade routes and learn more about how the residents of Kopetra lived.

But the scientists stumbled on one mystery that may never be answered. While excavating behind one of the old churches, they uncovered a water cistern filled with debris. Mixed in with the ancient rubble were the remains of human bodies that had been thrown into the cistern.

"Cyprus is a dry island, and the water supply is of great importance. To find these bodies in a cistern suggests a rather abrupt transition," Rautman says. "Right now we're interpreting it as evidence of an external attack."



Rob Hill photo

Graduate student James Terry is part of the MU team excavating an old Roman town on the island of Cyprus.

FYI Student Recreation Center

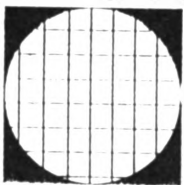
* All I.D.s will be turned off beginning Monday, May 13
To use SRC facilities after that date, Faculty/Staff must pay summer fees

* Lockers must be renewed or cleaned out by 5:00 p.m.
Friday, May 17

* NEW Towel policy beginning Monday, June 10
There will be a \$.25 non-refundable charge for each towel checked out with a valid F/S I.D. or SRC pass

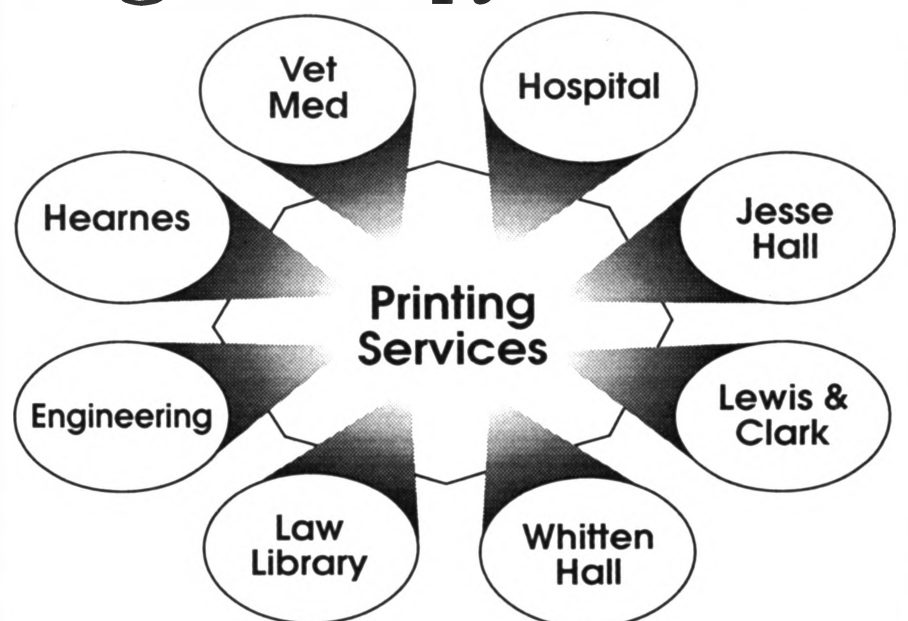
* Summer SRC Hours
(Saturday, May 11 - Friday, August 23)
Monday-Friday 6:00 a.m. - 8:00 p.m.
Saturday-Sunday 10:00 a.m. - 8:00 p.m.
(Interim Sat-Sun 10:00 a.m. - 6:00 p.m. only)

* Summer Office Hours, 106 Rothwell
(Monday, May 13 - Friday, August 16)
Monday - Friday 7:30 a.m. - Noon
12:30 - 4:00 p.m.
Closed Noon - 12:30 p.m.



MU Recreation/Intramurals 106 Rothwell Gym 882-2066 OSD

Printing Services Quick Copy Centers



Our business is to serve you!

Printing Services Quick Copy Centers are staffed by experienced professionals who will get your job completed on time! We are University employees working with you on your simplest jobs to your most complex projects. We offer 3¢ copies, a range of services, and advice and expertise for your copying needs.

Jesse Hall - Anna Rybolt
Law Library - Debbie Gibson
Whitten Hall - Beverly Stone
Vet Med - Bettie Chick
Hearnes - Pat Nichols
Engineering - Barbara Railton

Hospital - Carolyn Huttunen, Brenda Thornton
Lewis & Clark - Dee Samuels
Back-up operator - Kathy Weitzel
Plant - Eva Benedict, Nelda Jeffries
Duplication Supervisor - Becky Benedict

**Reach 11,000
Mizzou Faculty,
Staff and Retirees**

with your message, product, service or offer — place your classified ad in *Mizzou Weekly*. Vacation home to rent? Specialty products or services to offer? Needing to car pool? *Mizzou Weekly* can help you reach your audience.

Rates: 30 word maximum \$3.
The classified Advertising Section is open to faculty and staff members.
A home phone number is required in all classified ads.

Publication deadlines:
April 26 for May 7 issue
May 31 for June 11 issue

Mizzou Classifieds: A great way to get results. To get your classified ad in *Mizzou Weekly*, simply fill out the form at right and return it through campus mail with your check, payable to University of Missouri, to:
Mizzou Weekly
1100 University Place
Attention: Michelle Burke

Name _____

Department _____

Daytime phone _____

Run my ad in the following issue(s) of *Mizzou Weekly*: _____

- Category:** FOR SALE
 FOR RENT
 TRADE
 PERSONALS
 CAR POOL
 SERVICES

Use this space to write your classified message!



MISSOURI ALUMNUS

Our readers are involved, influential and affluent. Place an ad in the summer *Missouri Alumnus* magazine and reach over 135,000 Missouri readers and 215,000 readers nationwide.

**An effective way
to reach an
exclusive audience.**

To capitalize on a unique opportunity to reach this exclusive audience in the summer issue, call

Michelle Burke,
Director of Advertising,
Missouri Alumnus magazine,
(314) 882-7358.

Closing is April 26;
publish date is June 4.

Readers statewide 135,442
Readers nationwide 215,580
St. Louis 43,646
Kansas City 26,478
Columbia/mid-Missouri 25,018

Affluent readers
60% have household incomes of more than \$50,000

Mobile Missourians in the past 12 months
74% visited Columbia
46% vacationed at the Lake of the Ozarks
46% vacationed in St. Louis
29% vacationed in the Springfield/Branson area
33% vacationed in Kansas City

Involved readers
94% of those surveyed read the *Missouri Alumnus*
91% keep back issues

Moonlight serenade

Black Theater Workshop play presents universal theme in some non-traditional ways.

It's the eternal conflict: Do you follow your dreams, or sacrifice those dreams to make a commitment to another person?

"I think that's something we all can identify with," says Clyde Ruffin, director of the play "Moon on a Rainbow Shawl," which is being presented at the Rhynsburger Theater this weekend. "At one time or another, we all have to make that decision."

The conflict is the central theme of "Moon on a Rainbow Shawl." But the way in which Ruffin and MU's Black Theater Workshop are presenting the play is anything but ordinary.

"Moon on a Rainbow Shawl" is set in Trinidad in the late 1940s, and members of the University's Caribbean Students Association are lending assistance with dialects and technical details. The production addresses multiculturalism, as members of the cast represent a variety of ethnic groups. In addition, the play calls for several parts for children, and youths from the Columbia community are filling those roles.

"The exchange between the American students and the international black students has been especially rewarding," says

Ruffin, associate professor and chairman of theater. He has particular praise for Andy Phillips, a student from St. Lucia, and Sharon Squires, a student from Barbados. "Andy is doing the music, and he also taught the cast how to play cricket," Ruffin says. "And Sharon, a dialectician, brought in several students to help us with the dialect of the Caribbean. These are things you can't get from textbooks."

The central plot revolves around Ephraim, a youth torn between staying with friends and family in his poor neighborhood in Trinidad, or pursuing a new life in England. Rosa, the female lead, is played by a Hispanic student, Anjelica Estevez. "We allow Angie's background, her culture, to make an impact on the production," Ruffin says. "Multiracial families also are represented. Our goal is to develop a multicultural aesthetic."

This is the MU premiere for the play, written by Trinidadian playwright Errol John. "And it probably is the first Caribbean play ever put on at the University," Ruffin says.

There's also a surprise at the end, as technicians are creating an effect that never before has been used on the Rhynsburger stage. "I'm a little hesitant to talk about it, because then it won't be a surprise," Ruffin says with a smile. "People will just have to come out and see."

"Moon on a Rainbow Shawl" will be presented at 8 p.m. April 25, 26 and 27. Tickets are \$4.50 for faculty, staff and retirees, and reservations may be made by calling 882-7529.

Survey finds respondents favor censorship in wartime

Nearly three out of four Missourians believe the government should limit media access and impose censorship in war situations, according to a recent survey taken by the Media Research Bureau at the School of Journalism.

The poll involved a random telephone sampling of 1,000 Missouri residents. Of

'The public's willingness not to question censorship in crisis situations should cause concern for journalists.'

—Judith Sylvester
Director
Media Research Bureau

those who said they vote in nearly every election, 77 percent supported government censorship, while 48 percent of those never voting supported government censorship. Of all questioned, 74 percent said the government should control access and impose censorship in wartime.

"This trend of the public's willingness not to question censorship in crisis situations should cause concern for journalists," says Judith Sylvester, director of the bureau.

Television was selected by 65 percent of the respondents as providing the most accurate coverage of war news. Newspapers were selected by 15 percent as the most accurate, while less than 4 percent chose radio and news magazines.

Only 2 percent said the media had not provided accurate coverage, and local newspaper readers were more satisfied with press war coverage than those who do not read local newspapers.

Of those choosing television, 61 percent (584 respondents) thought CNN's war coverage was superior to the major networks' coverage. Only 3 percent thought CNN's coverage was not as good. Of those earning \$50,000 or more, 80 percent said CNN's coverage was better than the network coverage. In contrast, 44 percent of those earning less than \$10,000 considered CNN better.

The bureau reported that 58 percent of the respondents were women, and most were between 18 and 44. A total of 38 percent were high school graduates, and 24 percent had either college or advanced university degrees. The annual household income of 62 percent of the respondents was less than \$35,000 a year.

The survey of 1,000 households was conducted from January 30 to March 16. The sample was randomly generated by a computer so each region of the state was proportionately represented.

"Chances are 19 of 20 that if all adults in Missouri had been surveyed using the same questionnaire, the findings would differ from these results by no more than three percentage points in either direction," Sylvester says.

By the year 2000, one out of three people will develop cancer in his or her lifetime.

Let Our Team Of Detectives Take The Mystery Out Of Breast Cancer.

One out of nine women will develop breast cancer, but nearly 90 percent can be saved by early detection. The key to early detection is threefold:

- monthly self breast-exam
- annual breast exams by your physician
- mammograms

Mammograms are safe, affordable and play an important role in detecting breast cancer early—sometimes before a lump can be felt. All women should have a baseline mammogram between 35 and 40, every one to two years from 40 to 50 and every year after age 50.

Know the risk factors for breast cancer:

- age 50 or older
- family history of breast cancer—like a mother, sister or daughter
- giving birth to a first child after 30
- never having children
- early menstruation
- late menopause

The Detection and Information Center at Ellis Fischel Cancer Center offers the area's most comprehensive range of cancer-detection services. Our staff can help determine your personal risk for cancer and conduct those screenings that meet your individual need. And we take the time to teach you ways to lower your cancer risk. All of this at one location by a team especially trained to detect cancer early.

For more information, call 882-2100, ext. 251.

Left to right:
Glenna Malinak, R.N.
Sherrin Simms, R.N.
Dr. Roger Hofmeister
and Linda Grotewiel, R.N.



 **Ellis Fischel
Cancer Center**
The Staff for Life

CALENDAR

Send calendar items in Campus Mail to Patricia Reese, Mizzou Weekly, 1100 University Place, by noon Tuesday the week before publication. Events are free and open to the public unless otherwise noted.

Highlights

HEARNES CENTER: Singer Whitney Houston will perform at 7 p.m. April 23 at the Hearnes Center. Cost: \$25 and \$22.50.
SCHOOL OF FINE ARTS SERIES: The MU Black Theater Workshop will present the drama, "Moon on a Rainbow Shawl" at 8 p.m. April 25, 26 and 27 in Rhynsburger Theater. Cost: \$5.50, \$4.50 faculty/staff/retirees, \$3 students.
FACULTY MEETING: The spring general faculty meeting will be at 3:40 p.m. April 30 in Memorial Union Aud.

Stanley Rane, of Purdue University, will speak on "Ras-Induced Cell Transformation and Modulation in Ion Channel Activity" at 3:40 p.m. in 106 Lefevre Hall.

CHEMICAL ENGINEERING SEMINAR: Chung-Kuang Yang, a graduate student, will speak at 3:40 p.m. in 1035 Engineering Complex.

SECRETARIES INTERNATIONAL: The MU chapter of Professional Secretaries International will meet at 6:30 p.m. in 130 Heinkel Bldg.

HEARNES CENTER: See Highlights.

GALA FILM: The Gay and Lesbian Alliance will present the film "Making Love" at 7:30 p.m. in Gannett Aud.

STUDENT ENSEMBLE SERIES: The University Philharmonic, conducted by Edward Dolbashian, will perform at 8 p.m. at the Missouri Theater, 203 S. Ninth St. Cost: \$2.

23 Tuesday

ENGINEERING CONFERENCE: A hazardous waste management conference will begin at 8 a.m. at the Crown Center Hotel, One Pershing Road, Kansas City. Cost: \$85. Call 882-7584.

GRANTS WORKSHOP: The Office of Sponsored Program Administration will have a post-award management workshop for faculty from 9-11 a.m. in Tucker Forum, Gannett Hall.

BIOLOGICAL SCIENCES SEMINAR:

24 Wednesday

RECREATION/INTRAMURALS: Men's and women's track and field will be today at the Hearnes Fieldhouse. Call 882-2066.

HORTICULTURE CLUB: The club will have a Secretary's Day plant sale from 8 a.m.-2 p.m. in Greenhouse 16, next to the Physics Building.

EXHIBITS

BINGHAM GALLERY:

Undergraduates will exhibit their works through May 9. Hours: 10 a.m.-4 p.m. Monday through Friday and 2-4 p.m. Sunday. Gallery is in the Fine Arts Building.

BRADY COMMONS GALLERY:

The International Students Exhibit continues through April 25. The gallery is on the second floor of Brady Commons. Hours: 10 a.m.-5 p.m. Monday through Friday. Also, "Endangered Species in Missouri" will be on display through April 30 on the main floor of Brady Commons.

ELLIS LIBRARY:

Displays to celebrate Earth Week will be presented through April 30 on the library's main floor concourse. Hours: 7:30 a.m.-midnight Monday through Thursday, 7:30 a.m.-11 p.m. Friday, 9 a.m.-9 p.m. Saturday and noon-midnight Sunday.

MEMORIAL UNION:

"Missouri Workshop Theater," a display of Department of Theater memorabilia, will be presented in the south wing exhibit case through June. Also, displays to celebrate Earth Week will be on view during April in the north

hall. Hours: 8 a.m.-5 p.m. Monday through Friday.
MUSEUM OF ART AND ARCHAEOLOGY: "The 1991-92 Missouri Visual Artists' Biennial" is on display through April 28. "Early Twentieth Century Art Glass" is on view through May 26. "Renaissance Prints and Drawings: Representations of Women" is on display through May 26. The museum, in Pickard Hall, is open from 9 a.m.-9 p.m. Tuesday, 9 a.m.-5 p.m. Wednesday through Friday and noon-5 p.m. Saturday and Sunday.
STATE HISTORICAL SOCIETY: Works of George Caleb Bingham, Missouri painter and politician, will be on display through July. Included in the collection is a recently discovered painting, "View of Pike's Peak from Greenland." The gallery, in the east end of Ellis Library, is open from 8:15 a.m.-4 p.m. Monday through Friday. Also, "Fitzpatrick's Editorial Cartoons" will be shown in the north-south and east-west corridors of the gallery. The corridors are open from 8 a.m.-4 p.m. Monday through Friday and 9 a.m.-4:30 p.m. Saturday.
UNIVERSITY HOSPITAL: "Wearable: The Art of Ornament" will be shown through June 30 on the hospital's main lobby concourse.

CHILD ABUSE CONFERENCE:

"Child Abuse: A Community Response to the Problem," will begin at 8:15 a.m. at the Days Inn University Center, 1900 I-70 Drive S.W. Cost: \$75. Call 882-0215.

EMPLOYEE DEVELOPMENT SEMINAR:

K. Blake Danuser, administrator of human resource services and student aid for the UM System, and Betty Hosokawa, assistant director of the Counseling Service Center, will present "Drug Awareness" from 9 a.m.-noon in 146 Heinkel Bldg. Call 882-4859.

EXECUTIVE DEVELOPMENT SEMINAR:

Deborah Snellen will present "Fostering Leadership: A Woman's Perspective" at 9 a.m. at the Ramada Inn, 1100 Vandiver Drive. Cost: \$149. Call 882-4803.

MIDDAY GALLERY EVENTS:

William Biers, professor of art history and archaeology, will present "Rediscovering a Forgotten Legacy" at 12:15 p.m. in the gallery at the Museum of Art and Archaeology.

PERSONNEL SERVICES:

Personnel Services/Affirmative Action will present "Gateway: A Guide to the Employment Process" at 12:15 p.m. in 130 Heinkel. Call 882-7976.

ANTHROPOLOGY LECTURE:

Ralph Rowlett, professor of anthropology, will speak on "Druidic Sites in Woodland Europe" at 3:40 p.m. in 2048 Engineering Bldg.

MICROBIOLOGY SEMINAR:

Maxine Linial, of the Fred Hutchinson Cancer Research Center in Seattle, will speak on "Retroviruses and Retrogenes" at 3:40 p.m. in M640 Medical Sciences Bldg.

STUDENT RECITAL SERIES:

Zhenlai Qian, violinist, and Meng-yu Lian, pianist, will perform at 7 p.m. in Rogers Whitmore Recital Hall, located in the Fine Arts Building.

WOMEN'S CENTER:

Stephanie Dallam,

nurse practitioner, will present "Mirror Images: Dreams and Journals" at 7 p.m. in 229 Brady Commons.

SCHOOL OF FINE ARTS SERIES: The Studio Jazz Ensemble and the Jazz Lab Band, conducted by Scott Rumery and James Poth, will perform at 8 p.m. in Jesse Aud. Cost: \$2.

MSA/GPC FILMS: "Escape from Witch Mountain" and "Return to Witch Mountain," both rated G, will be shown at 8 p.m. in Ellis Aud. Cost: \$1.50, students free.

25 Thursday

HORTICULTURE CLUB: The club will have its annual bedding plant sale from 8 a.m.-5 p.m. in Greenhouse 16, next to the Physics Building.

EXECUTIVE DEVELOPMENT SEMINAR:

A two-day seminar, "Essentials of Supervision," presented by Gregg Martin and Hal Wood, will begin at 8:30 a.m. Cost: \$279. Also, Jo Behymer, assistant dean of education, will present the one-day seminar "The Secretary as Manager" at 9 a.m. Cost: \$149. Both seminars will be at the Ramada Inn, 1100 Vandiver Drive. Call 882-4803.

EMPLOYEE DEVELOPMENT SEMINAR:

Karen Touzeau, assistant vice chancellor for Personnel Services/Affirmative Action, will present "Employee Relations: Issuing Disciplinary Action and Handling Employee Grievances" from 9 a.m.-4 p.m. in 146 Heinkel Bldg. Call 882-4859.

WOMEN'S CENTER:

Nutritionist Melinda Hemmelgam will speak on "Health Food Fraud: Biting the Silver Bullet" in 229 Brady Commons. Also, the Book of the Month Club will meet at 7 p.m. in 229 Brady Commons.

STAFF COUNCIL: Group will meet at 1:15 p.m. in S204 Memorial Union.

GENETICS SEMINAR: Abraham Eisenstark, professor emeritus of biological sciences, will present "Survival Genes: Protection Against Death in *E. coli*" at 3:40 p.m. in 207 Curtis Hall.

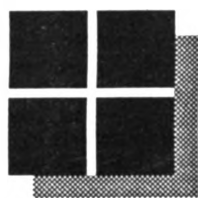
WATER RESOURCES SEMINAR: An organizational meeting for future seminars will be at 3:40 p.m. in 133 Mumford Hall.

UNIVERSITY HOSPITAL/CLINICS: James Daly, chairman of obstetrics and gynecology at University Hospital, will present "Complications in Pregnancy and Contraceptive Use" at 7 p.m. at the Health Information Center in Columbia Mall.

GALA FILM: The Gay and Lesbian Alliance will present the film "Outrageous!" at 7:30 p.m. in Gannett Aud.

SCHOOL OF FINE ARTS SERIES: See Highlights.

STUDENT ENSEMBLE SERIES: The Symphony Band and the Symphonic Wind Ensemble, conducted by Dale Lonis, Gary



Join Campus Computing for an afternoon by the Windows.

Join campus Microsoft Representative Chris Bertelson to discuss Windows 3.0, an innovative graphics-based software that allows you to use multiple applications at a time.

**April 24, 4:00 - 5:00 pm
Memorial Union S207**

Word processing—Demonstrated will be the capability of Windows to put graphics into your documents, create compound documents, dynamically link data from other spreadsheet programs, use different font sizes, and more.

Open to all faculty, staff, graduate and undergraduate students. No registration required. For more information, call Anne Waters at 882-2000.

Campus Computing

Remember Secretary's Week

HAWTHORN



ROOM

Call for reservations.
882-9488

Grant and Thomas Wubberhorst, will perform at 8 p.m. in Jesse Aud. Cost: \$2.

26 Friday

SEMINAR: Gerald Williams, of Brigham Young University, will present "Success as a Negotiator" from 8:30 a.m.-12:45 p.m. at the Holiday Inn Executive Center, I-70 and Stadium Boulevard. Cost: \$95. Call 882-7251.

EXECUTIVE DEVELOPMENT

SEMINAR: William Dawson will present a seminar on effective business writing at 9 a.m. at the Ramada Inn, 1100 Vandiver Drive. Cost: \$149. Call 882-4803.

PHYSIOLOGY SEMINAR: Avril Somylo, of the University of Virginia, will present "Mechanisms of IP₃-Induced Calcium Release in Smooth Muscle." Also, Andrew Somylo, of the University of Virginia, will speak on "Regulation of Calcium Sensitivity in Smooth Muscle." Call 882-8059.

JOURNALISM SYMPOSIUM: Dean Mills, dean of journalism, will be a panelist at "Journalism and the Communications Revolution," at noon at the Hyatt Regency Crown Center, 2345 McGee St., Kansas City. Cost: \$15. Call 882-1908.

LECTURE: Pablo Hernandez, of Las Vegas Medical Center, Las Vegas, N.M., will speak on "The Role of State Psychiatric Hospitals in Psychosocial Rehabilitation" at 1 p.m. in Kohler Aud., 5400 Arsenal St., St. Louis.

ENTOMOLOGY SEMINAR: Graduate student Jim Warren will speak on "Within Tree Dispersion of the Pinewood Nematode and its Effect on a Nematode-Beetle Relationship" at 3:40 p.m. in 2-16 Agriculture Bldg.

ASTRONOMY LECTURE: Val Gramm, instructor in astronomy at Columbia College, will present "A Universe Full of Life?" at 7 p.m. in 120 Physics Bldg.

MSA/GPC FILM: "Total Recall," rated R, will be shown at 7 and 9:30 p.m. in Jesse Aud. Cost: \$2.50, children \$1.

GALA EVENT: The Gay and Lesbian Alliance will present author John Gilgun at 7:30 p.m. in the upper lounge at the Newman Center.

LAWS OBSERVATORY: The observatory, on top of the Physics Building, will be open from 8-10 p.m. for public viewing of the skies, weather permitting.

SCHOOL OF FINE ARTS SERIES: See Highlights.

27 Saturday

HEARNES CENTER: The Missouri Expo Technology Show will be held from 9 a.m.-4 p.m. at the Hearnes Center.

MSA/GPC FILM: "Total Recall," rated R, will be shown at 7 and 9:30 p.m. in Jesse Aud. Cost: \$2.50, children \$1.

SCHOOL OF FINE ARTS SERIES: See Highlights.

28 Sunday

STUDENT ENSEMBLE SERIES: The Percussion Ensemble, conducted by Thomas Wubberhorst, L. Trent Davis and Pedro Guajardo, will perform at 8 p.m. in Jesse Aud.

STUDENT RECITAL SERIES: Three flautists, Elizabeth Bullis, Sharon Dunlap and Vicki Roys, will present a recital at 8 p.m. in the Whitmore Recital Hall.

MSA/GPC FILMS: "Monkey Business" and "Horse Feathers" will be shown at 8 p.m. in Ellis Aud. Cost: \$1.

29 Monday

WOMEN'S GOLF: Tigers will be the hosts for the Big Eight Championships today and April 30 at the A.L. Gustin Golf Course.

SOIL SCIENCE SEMINAR: Jingcai Zhu, a graduate student, will present "Effects of Soil Properties on Ephemeral Gully Erosion" at 3:40 p.m. in 133 Mumford Hall.

STUDENT ENSEMBLE SERIES: The Concert Band and the University Band, conducted by Dale J. Lonis, will perform at 8 p.m. in Jesse Aud.

MSA/GPC FILM: "My Life as a Dog" will be shown at 8 p.m. in Ellis Aud. Cost: \$1.50.

30 Tuesday

EMPLOYEE DEVELOPMENT SEMINAR: Dorene Novotny, director of Personnel Services/Employee Relations, will present "Employee Relations: Issues of Discrimination and Fair Employment Practices" from 8 a.m.-noon in 146 Heinkel Bldg. Call 882-4859.

NURSING CONFERENCE: Maureen Brown, family nurse practitioner, will present "Recent Trends in Women's Health" from 8 a.m.-4:30 p.m. at the Holiday Inn South, 4234 Butler Hill Road, St. Louis. Cost: \$75. Call 882-0215.

BIOLOGICAL SCIENCES SEMINAR: Miriam Golomb, associate professor of biological sciences, will present "RNA Polymerase II from *Caenorhabditis elegans*" at 3:40 p.m. in 115 Tucker Hall.

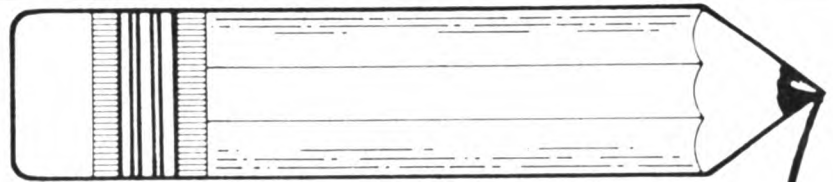
CHEMICAL ENGINEERING SEMINAR: Joong K. Kim, a doctoral student, will speak at 3:40 p.m. in 1035 Engineering Complex.

FACULTY MEETING: See Highlights.

PARKING COMMITTEE: The campus parking and transportation committee will meet at 3:40 p.m. in S207 Memorial Union.

STUDENT LEADERS: The G.O.A.L. office will present Emerging Leader Awards to 10 students at 7 p.m. in N201-202 Memorial Union.

STUDENT RECITAL SERIES: Pianist Minako Somekawa will perform at 8:30 p.m. in Whitmore Recital Hall.



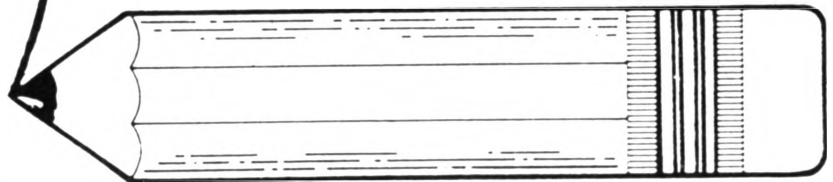
Reminder!

Mail in your
Staff Project Award
application form.

Over \$15,000 in proposals
funded in this award period.
Get your application in today!

If you have questions,
call 882-4269 or 882-4247.

Send application to 305 Jesse Hall.
Deadline is May 1.



DESKTOP ELECTRONIC IMAGING WORKSHOP

Presented by the
MU School of Journalism
June 21-22

The workshop is designed
as a basic electronic
imaging workshop.

- Topics will include:**
- Digitizing images into a computer
 - Computer-generated halftones from file, flatbed scanners
 - Still video demonstration and digital capture
 - Photo archiving

Registration is \$65 and is limited to 25 participants.

Desktop Electronic Imaging Workshop June 21-22, 1991

Name _____
Employer _____
Address _____
City _____ State _____ ZIP _____
Amount enclosed _____
Please indicate area of primary interest. _____

Mail to: Electronic Imaging Workshop
MU School of Journalism
134E Neff Annex
Columbia, Mo. 65211

Registration is \$65, which only covers admission to the workshop. Make check payable to: University of Missouri-Columbia

Salute!

Mizzou Weekly is compiling a mailing list of those who served in the Persian Gulf. Please send us information on people you know who have served.

He/She is faculty staff student alumni, class of _____

Name _____

Outfit _____ Rank _____

Campus Department _____

Title _____

City _____ State _____ ZIP _____

Phone _____

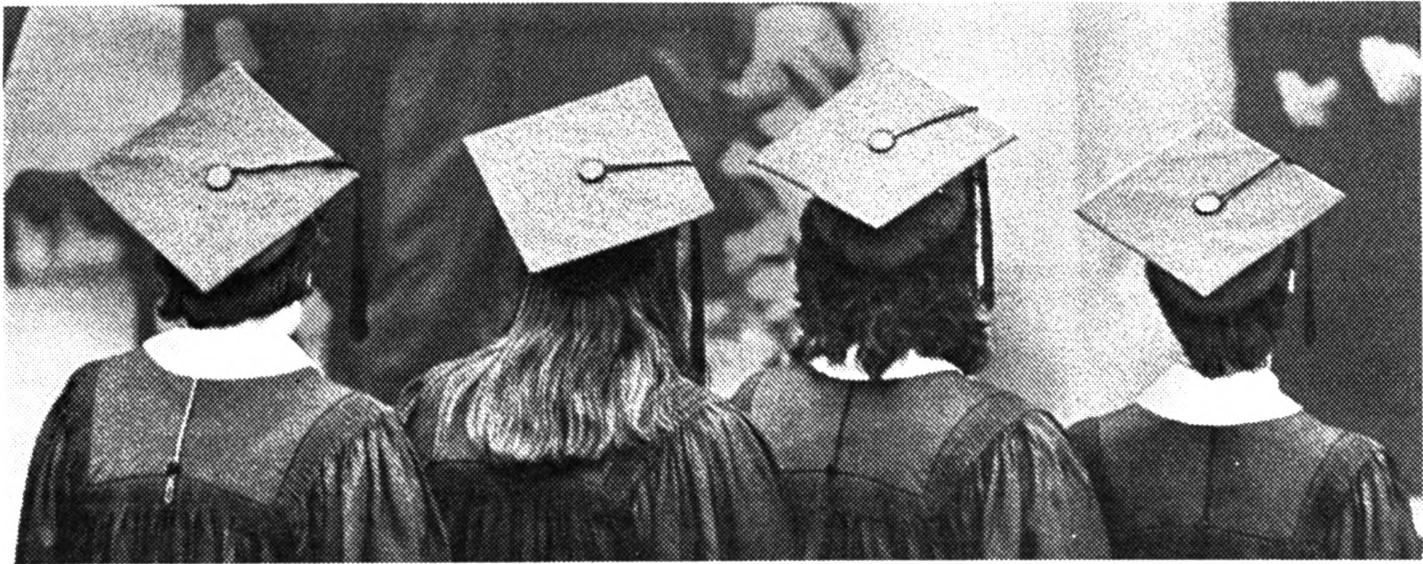
Submitted by _____

Phone _____

Return via campus mail to *Mizzou Weekly*, 1100 University Place.
Please use one form per person.

Graduation means
goodbye to spring breaks,
summers off,

And IBM student prices.

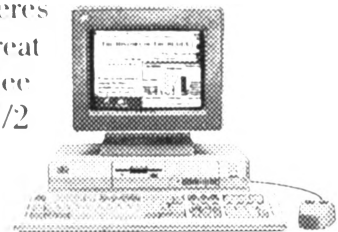


Before you put on your cap and gown, there's still time to take advantage of the great student price on an IBM Personal System/2.*

Whether you need to create impressive papers, graphics and spreadsheets for school, or business reports for work, or even resumes, the PS/2* comes preloaded with software that will let you do just that. And it has a mouse to make it easy to use. Plus, there are added tools like a notepad, calendar and cardfile—even games. And it's expandable so it can grow with you throughout graduate school or on the job.

While you're still a student, affordable loan payments are also available with the IBM PS/2 Loan for Learning. And on a different note, you can get a great low price on the Roland® Desktop Music System.

Graduation means saying a lot of good-byes. But before you do, there's still time to check into a great student price on a PS/2.* See what you can do with a PS/2 today—and what it can do for you tomorrow.



COMPUTER
SPECTRUM

For more information, call

Computer Spectrum
882-2131

IBM

*This offer is available to qualified college students, faculty and staff who purchase IBM Selected Academic Solutions through participating campus outlets. IBM 1-800-222-7257 or IBM Authorized PC Dealers certified to remarket IBM Selected Academic Solutions. Orders are subject to availability. Prices are subject to change, and IBM may withdraw the offer at any time without notice. *IBM, Personal System/2, and PS/2 are registered trademarks of International Business Machines Corporation. Roland is a registered trademark of Roland Corporation, US.
©IBM Corporation 1991

MIZZOU
WEEKLY

Publications and Alumni Communication
1100 University Place
Columbia, MO 65211

University Libraries
University of Missouri

Digitization Information Page

Local identifier MizzouWeekly(print)

Source information

Format Newspaper
Content type Text with images
Source ID Duplicate copies University Archives weeded out
Notes

Capture information

Date captured July-December, 2022
Scanner manufacturer Plustek OpticBook
Scanner model A300 Plus
Scanning system software Book Pavilion
Optical resolution 600 dpi
Color settings 8 bit grayscale for majority of pages;
 24 bit color for color illustrations/portraits/photographs
File types tiff
Notes

Derivatives - Access copy

Compression Tiff: LZW compression
Editing software Adobe Photoshop 2022
Resolution 600 dpi
Color same as captured
File types pdf created from tiffs
Notes Images cropped, straightened, and brightened.