

Approved general education criteria provides more flexibility in course offerings

More flexible general education courses may soon be a reality for MSU students.

The Academic Council Tuesday approved a set of criteria for the development of general education courses in the areas of communication, the arts and humanities, biological, physical and mathematical sciences, and the social and behavioral sciences.

The adoption of the criteria is one part of a general education plan approved by the council last year which

will allow students to make substitutions for the 45-credit general education requirement. Presently, this requirement is met through University College.

Dorothy Arata, assistant provost for undergraduate education, said the new plan provides the machinery for offering a range of courses acceptable for general education requirements from every academic unit on campus, including, but not exclusively, from University College.

Dean Edward Carlin of University College voiced his approval of the council's action, and said that University College will still provide the main thrust of undergraduate education with broadened educational opportunities from other colleges.

Gerald Miller, professor of communication, chaired the ad hoc committee which developed the criteria. Miller calls the criteria "interdisciplinary" and "broadly based."

The criteria, according to the report, are based on "the importance and role of general education in producing well-rounded individuals who can both develop personally and contribute socially in the years ahead."

The report stressed that "under no circumstances should general education become an academic wasteland receiving marginal economic and professional support."

"The committee believes that opportunities for written and oral communication constitute a vital aspect of most, if not all, general education courses."

The criteria for general education courses in communication are based on two levels: one which aims at attaining minimum proficiency in the reception and production of spoken English, and one which aims at continued growth or enhancement of existing skills already above this minimum proficiency level.

For a course to be acceptable at the first level, general education courses in communication must concentrate on the student's development as an effective communicator of written and spoken messages.

Criteria for general education courses in the other areas are stated as "the essential thrust of general education courses should concern social or philosophical issues that aid individuals as they attempt to define, understand, and evaluate the physical, social, and/or cultural worlds in which they live, and their own places in these worlds."

"The content and organization of such courses must be directly related to an understanding of human needs, desires, beliefs, and values—both the individual's and society's—and their behavioral implications."

"General education courses must provide important substantive content so that as an interested, educated layman the student will learn to identify issues, evaluate evidence, and draw conclusions on the basis of technical and specialized concepts and tools from a range of academic disciplines."

The report also states that "insofar as possible, general education courses should be open to all students who are making normal academic progress regardless of their fields of study."

Other council committees and University departments must study the whole general education plan before it goes into effect.

In other council action, a freshman honors program was approved, and bylaw changes were adopted to include librarians in the academic governance system and to create an Elected Student Council, comprised of the student members of the Academic Council to deal with student concerns.

The freshman honors program was established for entering freshman students with an excellent academic record in their secondary schools and evidence of high aptitude for academic achievement. Criteria for admission will include the student's scores on SAT and National Merit examinations and his overall high school grade point average.

Martin Hawley, associate professor of chemical engineering and chairman of the University Honors Programs Committee, said that the new program will help in the recruitment of outstanding high school students.

MSU News-Bulletin

Vol. 4, No. 16 17

Michigan State University

February 8, 1973

Old facilities, poor transportation hamper mail service to campus

Why is the mail so slow?

The word for faculty and staff who've been complaining recently about slow U.S. mail service is that in spite of a number of measures taken by the University and the U.S. Postal Service, things are not going to get much better in the near future.

A crowded and out of date postal facility in Lansing and the reduction of transportation modes available to the postal service in the area are blamed for the problems, most of which are confined to second and third class mail.

Clarence Hoffman, MSU messenger service supervisor, says many complaints are directed toward him because faculty and staff don't realize that it is the U.S. Postal Service that delivers all first class mail to departments on campus, not the messenger service department.

Hoffman says his department has not experienced any special problems in collecting and delivering campus mail or in processing all outgoing mail. The messenger service handles about 20,000 pieces of campus mail each day and processes about 4.6 million pieces of outgoing U.S. mail each year.

Barring exceptional circumstances, all campus mail continues to be delivered within 24 hours, he says.

Incoming mail, particularly that other than first class, is another matter. On the 16th of January, bulk rate mail was delivered to campus that had been mailed in November. Much first class mail from out of state takes three days to be delivered on campus.

William Sanders, regional customer service representative for the postal service, says the problems locally involve outdated facilities, lack of mechanization in handling the mail and transportation.

"In most places we still work the mail in the same way it was done in the late 1700's," he says. "Industry seldom uses the same technology it had ten years ago, but the postal service has not been able to take advantage of advances in mechanization."

The main Lansing Post Office, to

Office numbers are handy for giving directions, but may get in the way of speedy mail delivery.

All mail, whether campus mail or incoming U.S. mail, is delivered to departments rather than individual offices, according to University and postal officials.

Placing office numbers on correspondence serves no purpose and, if not accompanied by the department name, may result in a delay in delivery.

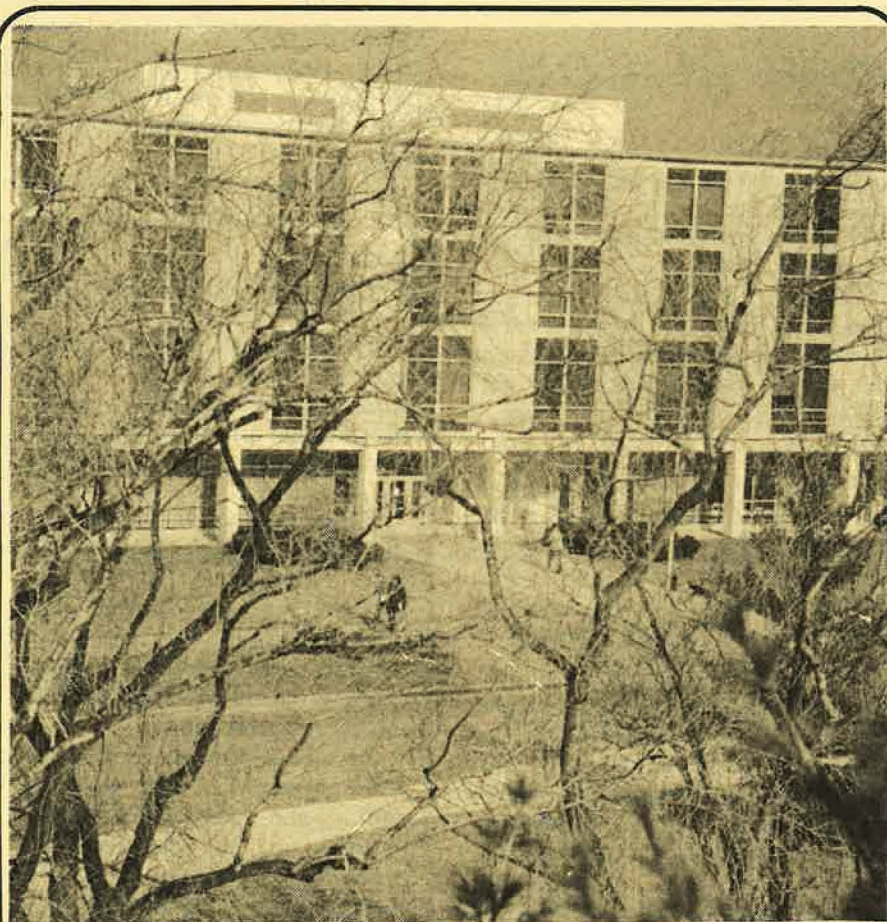
which all MSU mail is delivered before being routed through the East Lansing satellite facility to campus, was built in 1935 to accommodate about 200 employees. Since then, the volume handled there has multiplied and the

facility now has more than 800 employees.

In addition, the facility has been a regional processing center for 85 other post offices in central Michigan since being incorporated into the postal service's Area Mail Processing concept last October.

All available space is being used for processing, Sanders says, and no more will become available until at least 1975 when a new facility with more advanced mechanization for handling mail will be opened on Collins Road south of the Hospitality Inn.

"I feel the Area Mail Processing concept is a good one," says Sanders, "but we do not yet have the technology" (Continued on page 2)



Eppley Center

—Photo by Dick Wesley



PHILLIP MILLER

One of two MSU physicists who gave "invited papers" at last week's joint meeting of the American Physical Society and the American Association of Physics Teachers in New York was Maris A. Abolins, associate professor of physics, who is helping to put a few nuclear theories out to pasture.

Abolins is a member of a research team using the neutron beam of the Argonne National Laboratory to analyze the interactions of some of the tiniest particles of matter — the neutrons and protons that form the stuff of the cores of atoms.

Scientists have long been intrigued with protons and neutrons — nuclear particles with no charge. Now it seems that the way a high-energy neutron interacts with a proton depends on the spin of the proton.

Earlier, some scientists tossed aside this explanation.

To find out what happens when a neutron bumps into a spinning proton, the Abolins team used a method pioneered at Berkeley and at Saclay, France. They arranged protons to see if the arrangement of spins affected their interactions with incoming neutron bullets.

For a target they used protons of ordinary antifreeze. But first they added chromium to the antifreeze, bagged it and jammed and folded the bag into a copper box.

After freezing the antifreeze the scientists used a powerful microwave device — similar to a microwave oven — to help align the protons. Energy fed into the protons made some of them go to a different energy level and a different spin direction, until most of them were facing the same direction. A powerful magnet helped in reaching and maintaining the order of spin.

What the scientist had was something akin to a box of spinning tops. They shot neutron bullets from the Argonne particle accelerator into the box and

checked for patterns of ricocheting bits of matter.

"Our work confirms results of recent experiments by others," said Abolins.

"It turns out that the interaction depends quite strongly on the spin direction of the proton."

As the neutron grazes the spinning proton it picks up a charge, along with spin information, said Abolins, and becomes a high-energy proton.

Earlier, some physicists had guessed that during such interactions the neutron bullet must change into a proton by picking up tiny particles of "nuclear glue," called pions, from the target proton.

"But it can't be pions alone," said Abolins, "because pions can't transfer information about spin."

The outgoing protons receive the spin information, he said, because the pattern of ricocheting particles is dependent upon the spin of the target protons.

"Our current data are not in agreement with any one theory," said Abolins. "Pions may be involved, but so also are rho mesons and A-sub-two mesons."

Pions are one of many types of mesons. The pion, or pi-meson is a meson that has no spin. A rho meson has a spin of one. An A-sub-two meson has a spin of two.

Mesons evidently hold the nucleus of an atom together.

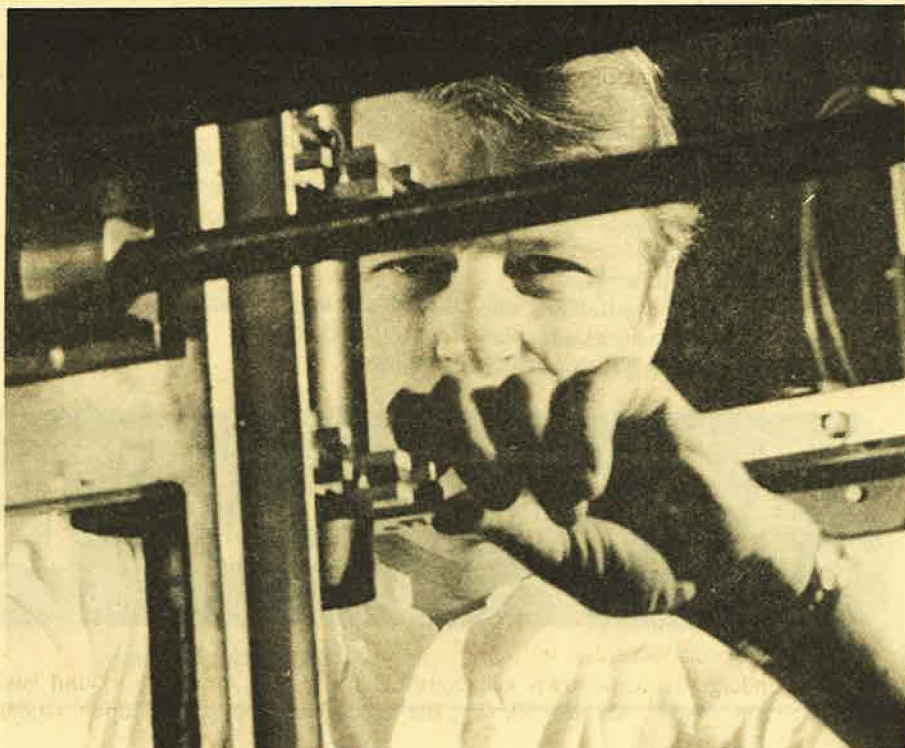
"It may be that we will have to come up with a new nuclear theory to explain our experimental results," said Abolins.

But as with other high energy research, much remains to be done before the structure of matter is understood.

Abolins, primarily an experimental scientist, said the team's research must meet the test of time:

"Theories come and go," said Abolins, "but the experiment stands, if done well."

Physics team research putting nuclear theories to pasture



High-energy physicist Maris A. Abolins checks a neutron-proton experimental set-up at Argonne National Laboratory, Ill. where MSU and other midwestern universities share facilities and equipment.

Study shows U program best in the country

MSU has been rated first in the country for one of its doctoral programs for training college and university administrators.

In a survey made last year, both directors and faculty members of college student personnel programs at 20 colleges and universities placed MSU at the top of the list.

MSU is one of about fifty institutions in the country which offer doctoral programs to prepare persons to become deans of students and to hold other positions which are concerned with enhancing students' learning experiences beyond the classroom.

For the survey, 20 colleges and universities were selected for further study as representative of the entire field.

The finding is part of the doctoral

dissertation of Marybelle C. Rockey, the former dean of women at Central Washington State College, who is presently on the faculty at Virginia Polytechnic Institute and State University. She received her Ph.D. in college student personnel programs last year at MSU.

Below MSU in order of ranking were Indiana University, Florida State University, Columbia Teacher's College and the University of Michigan.

Survey participants cited the quality of the faculty and the graduates in determining the top institutions. Also mentioned were the curriculum, research, new programs and the breadth and history of the program.

This is the first such survey ever made of the college student personnel programs. MSU has been offering this Ph.D. program for almost twenty years.

... Why the mail is slow

(Concluded from page 1)

to make it run as efficiently as it will in the future."

Sanders added that tentative plans are underway to eliminate the second delivery each day to campus departments, largely because studies have shown that about 90 per cent of all first class mail reaches the campus in the morning delivery and the second delivery consists of about 87 per cent other than first class mail.

Another major problem for the Postal Service is transportation. Since no passenger trains serve Lansing anymore, and since the elimination of bus-like Highway Post Offices, the postal service has lost the ability to process mail in transit to and from the area.

In spite of the problems, Sanders says most first class mail between the campus and most of the Lower Peninsula gets second day delivery.

Claude Courey, superintendent of mail at the East Lansing Post Office says that facility is experiencing no particular problems in processing mail coming to campus.

The University Services and Materials

Management Division, of which the messenger service is a department, has taken a number of steps to help speed the handling of both campus mail and incoming U.S. mail.

Director John Lewis said an arrangement has been made to deliver all outgoing mail directly to the Lansing Post Office, thus bypassing the East Lansing facility and saving 10 to 12 hours.

In addition, the campus phone directory was changed last year so the department name appears next to the individual's name. This was done because the department, not the office number, is the critical element in delivery of all mail on campus.

For the same reason, plans are being made to change letterheads on University stationary to give more emphasis to the department. Incoming letters addressed without department name are often delayed in delivery.

University and postal officials have met during the last week to discuss alternatives to the present arrangements, for delivering mail on campus but nothing final has been decided.

—MIKE MORRISON

Trustee praised

Trustee Patricia Carrigan was the subject of a motion by the Residence Halls Association (RHA) thanking her for her active interest in continuing communication with the student body.

"Be it resolved, therefore, that the RHA assembly applauds the fine example set by Trustee Carrigan and looks forward with anticipation to continued cooperation between Trustee Carrigan, the RHA assembly and the MSU student body."

Paula Fochtman, president of the RHA assembly, said that the motion was passed because Mrs. Carrigan, on her own initiative, meets every Thursday with campus student leaders. "She is always concerned and gives us worthwhile advice," Miss Fochtman said.

"We really appreciate knowing that somebody cares," she added.

Ticket prices up

MSU, along with other Big Ten universities, will charge \$7 for football tickets sold to the general public beginning next fall. The \$1 increase is necessary to cover rising costs, according to Athletic Director Burt Smith.

Prices for faculty and staff members, in the past half the regular price, will be determined at the Athletic Council meeting Feb. 19.

MSU News-Bulletin

Editor: Mike Morrison

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Editorial offices: Rooms 323 and 324, Linton Hall, Michigan State University, East Lansing 48823. Phone: 355-2285.

Published weekly during the academic year by the Department of Information Services. Second-class postage paid at East Lansing, Mich. 48823.

Around the campus: A summary

New Vet Med curriculum set

Reflecting the growing flexibility in veterinary medical education and changes in the practice of veterinary medicine, a new curriculum will be launched next June by the College of Veterinary Medicine, oldest of MSU's three medical schools.

The new professional program is based on an entering class of 115 students admitted once a year, in contrast to the current two entering classes per year, each containing 50 students.

Flexibility of the new curriculum allows students in their last year of work to pursue electives tailored for such specialized fields as public health, laboratory animals, zoo and exotic animals, and the more classical small animal medicine and surgery and large animal medicine and surgery.

W. W. Armistead, dean of the college, cited the need to educate new kinds of highly specialized veterinarians to keep pace with the changing pattern of veterinary practice.

"The new MSU curriculum is a forerunner among the nation's 18 veterinary medical colleges," he said. "A similar program is underway at the University of Missouri and several other schools are considering curriculum changes."

Armistead anticipates increased utilization of diversified methods and techniques of teaching, and foresees programs for continuing education through video tapes, films, cassettes and other media to be used by the practicing veterinarian without leaving his practice area.

The new curriculum also enables the practicing veterinarian to participate in on-campus veterinary medical specialties.

The undergraduate program will continue to operate on a year around basis, with a five - week vacation during the second summer added upon student request.

Two veterinary medical students served on the 12 - member curriculum committee chaired by Hiram Kitchen, associate professor of biochemistry and assistant director of the center for laboratory animal resources.

Course content for the undergraduate curriculum now is divided into three segments. The first provides instruction in basic sciences fundamental to the understanding of medicine, such as biochemistry, microbiology, physiology, and pharmacology. Introductory classes in clinical science provide the beginning students with experience in patient care earlier in his professional education.

The second segment, or the core of medicine, utilizes the organ systems approach, such as cardiovascular, muscular, renal, and respiratory. Teaching comes from departments of small animal medicine, large animal medicine, and pathology, with additional instruction from basic science departments.

The final or clinical segment provides special electives dictated by career plans. Also available will be a five - week preceptorship conducted in an off - campus setting by a practicing veterinarian who will teach as an unpaid member of the voluntary faculty.

it also provides public radio with a freedom to reflect all aspects of human behavior."

WKAR programming emphasizes the diversity stressed by Estell. WKAR-AM (870 on the dial) broadcasts daily agricultural reports; hours of music, news and features for the black community daily in the "Takin' Care of Business" show; "Variedades En Espanol" for central Michigan's Spanish-speaking population, and programs of news and public affairs from the left to the right in political outlook — all this, plus radio documentaries.

WKAR-FM (90.5 on the FM dial) carries programs of fine arts, operas, concerts and dramas, with segments of jazz and folk-rock music — all in stereo.

WKAR was Michigan's first "educational" radio station and one of only four radio stations in the state when it was licensed on Aug. 18, 1922.

U biologist looks at Womens Lib

Social institutions have not kept pace with technological, educational and other developments in opening new avenues for women to express their humanity and apply their intelligence according to Alwynelle S. Ahl, associate professor of natural science, writing in the winter issue of the "University College Quarterly."

In an article entitled "A Biologist's Perspective on the Women's Liberation Movement," Mrs. Ahl said Women's education for the world of the future must make them "truly free to choose and pursue their own cultural destiny" while maintaining biological differences.

She reviewed evolutionary male and female roles from the early forest-dwellers with "strong arms for moving through trees and gathering food," to the divided "prairie primate" system for care of the young and feeding of the group, with women in the "cave-nest."

"Homo sapiens," she said, "evolved a role differentiation that is quite common among birds today."

"Women's work, her cultural and evolutionary role, centered around the cave-nest. The pattern of human activity has remained virtually the same through the ages."

The January issue of the quarterly is devoted to women in higher education. The sole male contribution is by Quarterly Editor David D. Anderson, who discusses Sherwood Anderson's "Perhaps Women" which focused, more than 40 years ago, on women's potential in preservation and reconstruction of humane values in an increasingly industrialized society.

Other contributions are "Women: Potentials and Perspective," by Mildred Erickson, assistant dean for Continuing Education in the University College; a study of higher education for American women since 1900 and a Women's Lib poem by Nancy P. Scott, assistant professor of American Thought and Language.

International programs to hold workshop

The Foreign Student Office of the Dean of International Studies and Programs will hold an in - service training workshop on Thursday morning, Feb. 8 from 9:00 a.m. to noon — the first such attempt to strengthen the services accorded the foreign students and scholars on campus.

A.G. Benson, foreign student advisor, and Richard Downey, counselor, have arranged a program to acquaint personnel throughout the University with the procedures for handling foreign student records and related materials.

Included in the morning program will be information on admissions, immigration and visa - related problems, financial aids, volunteer services available to foreign students, and several other areas of concern which require specialized handling.

Feb. is Public Broadcasting Month

February is "Public Broadcasting Month," and MSU's public radio and television stations are out to "show and tell" the public about their kind of broadcasting.

The February recognition of Michigan's stations was proclaimed by Gov. William G. Milliken, who said public broadcasting "is a mechanism for bridging gaps during a time when personal communications seem harder and harder to achieve."

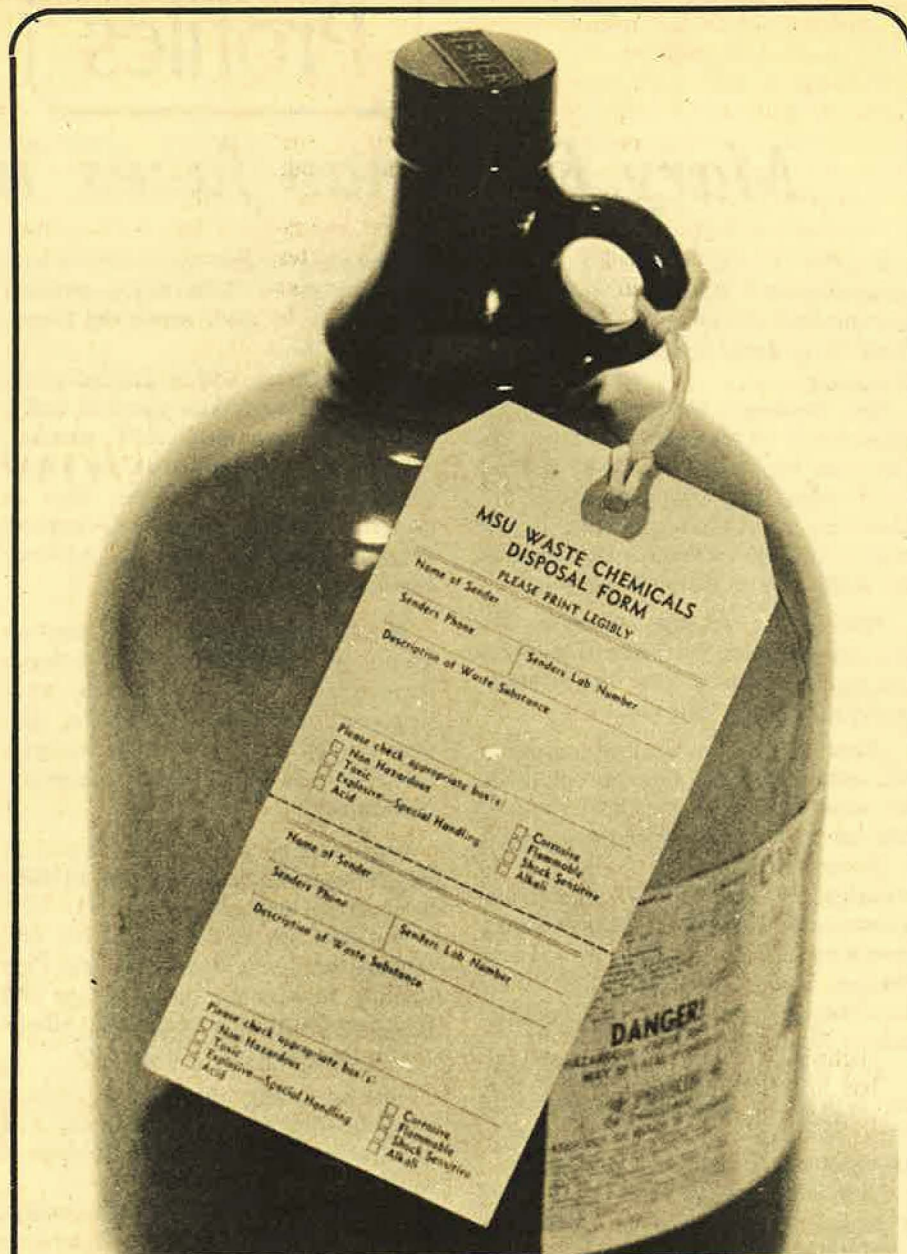
Eleven public radio and six public television stations, including WKAR-AM and WKAR-TV, are being honored this month for their service to the people of Michigan.

Part of WKAR radio's celebration of Public Broadcasting Month will be two special programs. One, a four-hour jazz program live from Ann Arbor, will feature three of Michigan's top jazz experts, including WKAR's Gary Laehn. The three hosts will talk with the studio audience, discuss the various forms of jazz, take telephone requests and play their favorite jazz recordings — from the earliest to the most modern. The program will be heard on WKAR-FM at 8 p.m. Saturday, Feb. 10.

Another special program similar in format to National Public Radio's "All Things Considered" (which is heard each weekday on WKAR), will offer listeners an hour of news and features about Michigan on WKAR-FM at 7 p.m. Wednesday, Feb. 21.

Michigan's public radio stations cover almost every county in the state with music, news, public affairs and informational and educational programming — all public-service broadcasting without commercial messages.

"As public radio stations, we are not responsible to sponsors, who may have their own point of view," said Richard Estell, general manager of WKAR-AM and FM and chairman of the board of National Public Radio, "but we are responsible to the public, which has many points of view. The responsibility is awesome, but



Tags to identify hazardous chemicals have been distributed to all departments on campus as part of the month-old chemical waste disposal program. The Department of Public Safety picks up chemicals every Thursday but will pick up materials at other times if necessary. To arrange for pick-up and to order more tags (which must be completed and attached to chemicals before they can be disposed of), call 355-2208.

New sport? Skiing on trash hills!

The first time they hear it, Mark Rosenhaft admits, people usually scoff at the proposition that MSU should collect all the papers and solid waste it accumulates and start piling the stuff into man-made ski slopes.

But once the snickers subside, the idea becomes appealing. And now Rosenhaft's proposal, while still far from becoming a reality, is at least into serious discussion. MSU planners and faculty researchers are now holding meetings to study the feasibility of a "trash mountain" as an alternative method of disposing of the University's trash accumulation that reaches 250 tons a week.

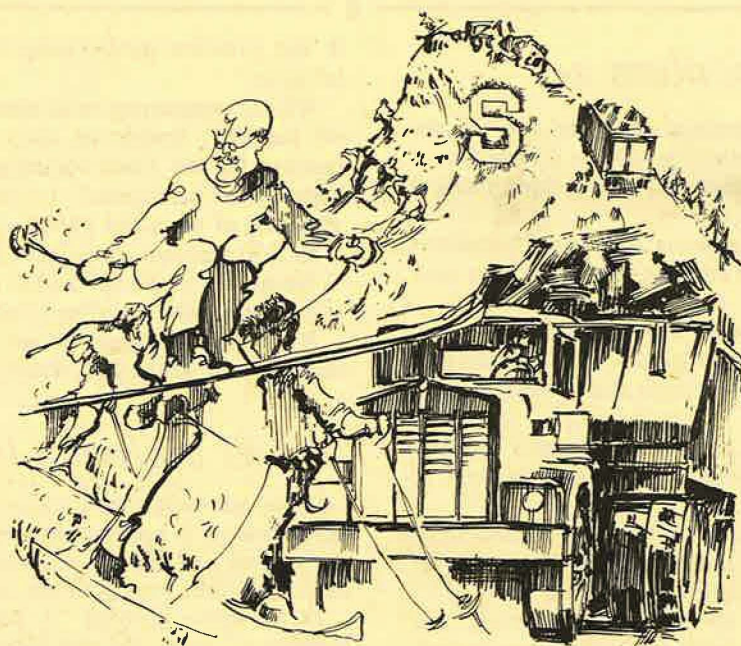
MSU trash haulers now make eight to 10 trips a day to a commercial landfill. It costs the University about \$30,000 a year just to use the landfill.

Starting a campus landfill and turning it into a ski slope is perhaps Rosenhaft's most dramatic proposal to date, but it is only one of the many he has promoted since he became director of the Waste Control Authority two years ago.

The authority was created in 1971 on the recommendation of a consulting engineering firm. The U.S. Environmental Protection Agency reports that it is the first office of its kind on a U.S. campus.

Since its inception, the authority has developed and promoted a variety of projects, including:

- The State News recently experimented with the use of recycled newsprint. Eventually the paper plans to be printed wholly on recycled paper.



—Drawing by Bob Brent

And a student-directed program encourages collection and recycling of the newspaper.

- Nearly 30 per cent of the paper used for MSU's official brochures, catalogs and other publications during 1972 came from recycled stock.

- Under a new program, all hazardous chemicals wastes ready to be discarded are collected and turned over to a Detroit firm for disposal. No longer are such wastes dumped into underground sites.

- The authority sponsored a Red Cedar River cleanup day last fall, and another such event is planned for this spring. The office also promotes

campus litter control through increased placement of waste receptacles decorated with "Pitch In" decals.

Thirty-year-old Mark Rosenhaft is trained as a microbiologist, but he is a self-acknowledged missionary when he sets out to promote a new way of controlling campus waste.

Rosenhaft's enthusiasm oozes, for example, when he talks about the plan for building a ski slope on a foundation of trash. And his goals aren't modest: He would like to have a small hill ready by next winter, and, in two or three years, a longer run for advanced skiers. Rosenhaft thinks the operation would require about 50 acres, probably

somewhere south of the main campus.

But others point out that a lot of planning and study will have to be done before the idea can even be proposed to the central administration.

The director of the campus planning division, Milton Baron, emphasizes that a number of questions need answers before students can start waxing their skis.

Baron is concerned about the possibility that residues from the trash might seep into underground water supplies, about the stability of trash and soil formed into a hill, and about the cost of building and maintaining a ski facility.

And he says that attention should be directed toward eventual recycling of trash, not just finding new methods of throwing it away.

Louis F. Twardzik, professor and chairman of the park and recreation resources department, thinks the plan is feasible. "It's a matter of putting all the things together," he says.

Twardzik also sees an above-ground landfill as a "very important research and demonstration exercise." A whole range of topological alterations could be tried and studied, he says, with man-made hills and valleys fashioned to bring variety to the predominately flat landscape.

Orlando Andersland, professor of civil engineering, is also interested in the plan, but he reserves his judgement until more study has been done.

Andersland is currently involved in a project funded by the Environmental Protection Agency to examine the effects and properties of an experimental landfill for papermill sludge.

These men and others will be involved in discussions to decide if a trash mountain should become a reality.

But Rosenhaft maintains an unswerving optimism.

"We are ideally suited for a ski slope," he says. "We now provide no outdoor winter activities for our students. Since I first mentioned the idea, I've had literally hundreds of calls, mostly from students, wanting to know when the slope would be ready."

Rosenhaft says that the university will be producing ever-increasing amounts of trash—especially when its remaining incinerators are replaced by compactors—and he adds that landfills still represent the cheapest form of disposal.

By piling trash above the ground—and covering it daily with dirt—"you increase the longevity of a landfill," Rosenhaft says.

"Space for landfills is being rapidly depleted," he adds. "If we can help develop the concept of building them above ground, it could help cities and towns everywhere."

Rosenhaft reports that similar projects are being built or planned elsewhere, including one in Wyandotte and another near Chicago.

Viewing MSU's total waste control program, Rosenhaft expresses concern about the need to update technology and to regard wastes more "as a resource." Beyond his vision for a "trash mountain" loom more ideas for waste re-use: shredded newspapers as animal bedding, for one, and "glassphalt" to surface more campus bicycle paths, for another.

—GENE RIETFORS

Profiles

Mary Rothman faces 'nitty-gritty'

With "an approach of reasonableness," Mary K. Rothman, the new director of women's affairs said she plans to get down to the "nitty-gritty" of her job.

Mrs. Rothman, 29, has been on the Department of Human Relations staff less than two weeks. She said she has been using the time to assess the University's affirmative action policy and to find out "where the University is at" in the area of women's interests.

"Before you can plan and implement any new program, you have to see what has been done and what the interests and problems are," she said.

According to Mrs. Rothman, much of the groundwork has been accomplished by various groups at the University, and she has been meeting with these groups.

Some interests that she will be investigating in behalf of women are educational benefits, faculty salaries, communication vehicles, day-care centers, career counseling, life-long educational opportunities and graduate school admissions.

Mrs. Rothman said she has never been an activist in women's organizations, but has had an interest and a commitment to change for women.

"I believe that the best way to affect change is by working within the established channels and making those channels work for you," she said.

She added, however, that both the activist and passivist are necessary in bringing changes.

"The activist has forced the problems to center stage, which has been needed," she said.

According to her, the problems have been brought to the surface, and now it is necessary to work within the system to resolve them.

Mrs. Rothman will be assisted in her task by a professional assistant and a clerical-technical staff member. Additionally, she said that she will be assisted by other offices, such as minority affairs and minority training programs, and the Women's Advisory Council, which she chairs.

Mrs. Rothman came to the position after six years with the Michigan Department of Civil Service as a personnel management specialist. She also worked for one year as women's editor of the Ford Motor Company's newspaper.

She received a bachelor's degree in English from MSU in 1965, and an MBA in personnel management in 1971.

She said she is aware that her new position has a very high-risk, "but I am looking forward to the challenge and providing input into an area that affects a major segment of the University."

"It is a way that I can make a meaningful contribution that can lead to effective solutions to the problems of women," she said.

"I don't see the position as a crusade, but as an organized effort to enhance the status of women."

Mrs. Rothman added that she hopes her office can initiate preventative, long-range programs to aide the interests of women, rather than just dealing with immediate problems.

Her responsibilities will include



MARY K. ROTHMAN

development of the University's affirmative action program for women, investigation and mediation of complaints of discrimination against women, assistance in the recruiting of women for faculty and staff positions, and liaison with academic and other departments on matters affecting women.

—SANDRA DALKA



Margaret Brodbeck and Terry Armstrong

Children's textbooks may be discriminating

Three MSU education faculty members and an instructor in the Center for Urban Affairs are among a larger number of educators who feel that textbooks for children have not gone far enough to remove old stereotypes about minorities and ethnic groups.

All four were among 46 reviewers who participated in a Michigan Department of Education study of 25 social science textbooks last year.

That study concluded that although some textbooks reflect progress, teachers must be extremely wary of using the textbook as a single instructional tool in the classroom. Only 31 per cent of the ratings of the textbooks studied were favorable while 69 per cent were negative. All four MSU faculty members agreed that supplementary material should be introduced into the classroom to portray more effectively America's pluralistic society and overcome the inherent limitations of textbooks.

Daniel Jacobson, director of the Social Science Teaching Institute, places little criticism on the publishers. Instead he sees the textbooks as a reflection of the larger society.

"Writing American history is a great problem," he says. "It's still pretty clear that we have a mainstream America that is WASPish. You certainly can't disregard the mainstream. The problem is, how much do you devote to the racial and ethnic groups?"

Speaking of the book he reviewed for the state study, Jacobson said, "The Indian is treated basically as a challenge to the Puritan enterprise, although the author does better in the chapter on the frontier and the Indian's westward movement. Nowhere, however, are the problems of the present-day Indians considered. Chicano and/or Spanish American travails and contributions are not touched upon, and the Irish, Poles,

Italians, Jews, etc. are given, perhaps, short shrift."

He said the text was, in many ways, first rate, but "a book cannot be all things to all people."

William W. Joyce, professor of elementary and special education and editor of a supplement to the official journal of the National Council for the Social Studies, says "social studies textbooks for the early elementary grades may well be among the most influential books that children read in school."

He believes that merely painting the faces black or brown, or "writing in" the black American are insufficient. In most cases, he says, the publisher must have an entirely new book written — a time consuming undertaking.

Janet Alleman, associate professor of education, is more critical than Jacobson of the publishers. She feels their field representatives are not attuned to the issues of today and that many are not ready to risk changing their textbooks.

She puts the responsibility for a balanced education squarely on the shoulders of the teachers, and urges them to provide supplementary material to make up for the shortcomings of some of their textbooks.

Richard Thomas, researcher in black history in the Center for Urban Affairs, agrees with the need for outside material, such as paperbacks, but still believes teachers will continue to teach what they want to believe.

"Textbooks are only one part of the cycle," he says. "Teachers are not familiar with the historical discrepancies."

Thomas says colleges and universities should produce better informed teachers, and black historians should be encouraged so children can be exposed to different interpretations of history.

—JANET MARSH

It takes two to schedule

Terry Armstrong and Margaret Brodbeck have talked to each other every day for about five - and - a - half years.

They just met last Friday. Their curiosity got the best of them.

Armstrong is assistant registrar in charge of classroom scheduling. Mrs. Brodbeck is in charge of traffic and scheduling for Instructional Television Services (ITV).



BY
JANICE
HAYES

And when they met the conversation soon turned to scheduling.

Armstrong explained that his job entails scheduling MSU's 40,000 students in their regular classes, plus the Evening College, free University classes, and many student organizations. The Office of the Registrar publishes the Schedule of Courses and Academic Handbook each term.

Mrs. Brodbeck said that ITV scheduling includes studio times, tape machines, tape numbers, permanent and special classroom assignments. A stenciled program schedule of all courses using ITV is distributed to 200 people on campus each term. The Scheduling office is also responsible for a daily log which updates this schedule with special requests and additions.

Both Armstrong and Mrs. Brodbeck work at least a term in advance, sending letters to department heads requesting their needs for facilities. The biggest problem is getting professors to utilize the unpopular hours. Classroom assignments must be scheduled for ITV courses and special playbacks by Mrs. Brodbeck through Armstrong. This necessitates daily contact.

Armstrong said that there are special considerations for scheduling ITV courses. He cited two examples. Psychology 290, Human Sexuality, must be scheduled in classrooms where the television sets are equipped with special adapters enabling only certain rooms to receive the program. Accounting and Financial Administration courses are scheduled in classrooms with talkback facilities so

students can communicate with the professor.

They agreed that an unusual aspect of their jobs is getting to know people around campus by their voices. Mrs. Brodbeck said, "You hear a voice day after day and you finally get together out of curiosity."

Retired from the Navy after 24 years, Armstrong said that people are always dropping into his office out of curiosity. "A lady that I've been working with for six or seven years stopped in one day to see what I look like. She laughed when she saw me and said she had pictured me as short and fat."

Armstrong, who has a reputation for holding information in his head about every classroom on campus, told how his job has changed since he started in October of 1963.

"Before we computerized, we had to hand post all information after registration. We wouldn't know until we had compiled all the information if we had scheduled 90 people in a room that would only hold 80. Then room changes were made.

"Now all that is taken care of before registration begins — with the help of early enrollment. We work during registration in the class card arena, approving adds and making decisions with departments on any last minute changes," he said.

Mrs. Brodbeck talked about how things have changed for her. She first started at ITV (then Closed Circuit Television) in 1963. She worked for two - and - a - half years and then left until 1970, when she returned as the director of traffic and scheduling.

"When I first started we only had four tape machines and we took role in every television course. Now we are working with over 2,000 videotapes and implementing a new system to enable quicker access to our library material," she said.

The scheduling jargon continued to flow.

Armstrong and Mrs. Brodbeck laughed about some unusual requests. In the summertime, there are always calls for a room on the west side of the building for morning classes, because of the sun. Sometimes a student calls to request a playback he has missed, and can't understand why a playback can't be scheduled for one individual. And the favorite is, "I want to schedule a class seven minutes walking distance from Wells Hall. . ."

JMC evaluation extended

Are grades a true evaluation of a student's abilities and aptitudes? The staff and students at Justin Morrill College, don't think so.

The Justin Morrill Pass — No Grade (PN) evaluation system experiment, which is now in its third year of operation, has been extended to 1975.

According to Neil Cullen, JMC instructor, the system attempts to give the student more information about himself, by using written evaluations instead of grades.

The system has brought with it a variety of questions and criticisms. For example, what happens to a student under the PN grading system when graduation roles around and he wants a job?

According to Cullen, each graduating student has a profile which is a combination of all of his written evaluations. This profile is sent to

interested employers and graduate schools and serves as the student's transcript.

Since this year's class will have the largest proportion of PN evaluations, an extensive follow - up program is planned in order to find out exactly how these students are received in the job market and graduate school.

Employers who have tended to rely heavily on grades in the past, are not enthused about the trend toward eliminating grades. They feel that grades are a convenient and fairly reliable indicator of a student's future job success.

Cullen disagrees with this viewpoint. He says that the written evaluation system gives employers a more complete picture of the student as an individual.

Since JMC students take about half of their courses outside the college, employers can utilize both systems.



FRED BRUFLOTT

A new interpretation of Shakespeare's "Hamlet," a folk-dance group from Yugoslavia, concerts by the MSU Symphony Orchestra, the State Singers and a renowned cellist top the entertainment list on campus this week.

And if that isn't enough, you might want to visit the Faculty Art Exhibition in the Kresge Art Center Gallery through Feb. 25. Twenty faculty artists are represented.

Tonight at 8:15 p.m. the Lecture-Concert Series (Series "A") presents the Singers and Dancers of Luubljana in the University Auditorium. The performers are really members of two groups, the France Marolt Dancers and the Tone Tomsic Choir, both of which were founded by France Marolt, an ethnomusicologist.

The Choir presents songs drawn from its rich repertoire of more than 300 folk melodies. The dancers authentically present the little-known dances of Yugoslavia.

HAMLET

Fred Piegonski, a Ph.D. candidate in theatre at MSU, promises that his interpretation of "Hamlet" will not be "an historical reproduction of what the Elizabethans did with the play."

Now the characters have become circus performers and will use dance-like movements and gymnastics to physicalize the emotions presented in Shakespeare's drama. According to Piegonski, the basis for the circus idea came from the Russian innovator,

Meyerhold, who in the early 1920s produced various plays using movement to express the words with emphasis on theatricalism. Set designer Michael Hans translated the circus theme into a set which includes several circular platforms, a large structure for climbing, and a tent-like effect from large triangular shapes of orange and yellow canvas.

The play has been staged largely for the benefit of MSU humanities students reading "Hamlet," but is open to the public as well.

"Hamlet" will be offered at 8:15 p.m. tonight through Sunday in the Union Ballroom except for Friday's production which will be in Wonders Kiva. There will be a small admission charge.

ORCHESTRA

Bystrik Rezucha of Czechoslovakia, winter term guest conductor of the MSU Symphony Orchestra, will make his U.S. conducting debut with the orchestra at 4 p.m. Sunday in Fairchild Theatre.

Soloist for the concert will be Nedda Casei of the Metropolitan Opera Company who will sing arias by Donizetti, Rossini and Saint-Saens. She is the wife of John Wiles, assistant professor of music.

A highlight of the program will be the premiere of "The Turning Mind" by H. Owen Reed, professor of music. Rezucha will also conduct the orchestra in Cesar Franck's "Symphony in D Minor" and the U.S. premiere of "Amoebae" by Jozef Gresak, a



Mezzo soprano Nedda Casei and conductor Bystrik Rezucha.

contemporary Czech composer.

Rezucha is the conductor of Czechoslovakia's newest Philharmonic located in Kosice. Previously he was a conductor of the Symphony Orchestra of Radio Bratislava. He received several awards for his outstanding recordings of contemporary music with that group. Although this is his first U.S. appearance, he serves frequently as a guest conductor in Germany, Poland, Hungary, Austria, Italy, Yugoslavia and the USSR.

STATE SINGERS

MSU's 68-voice mixed ensemble, directed by Dr. Robert Harris, will be heard at 8:15 p.m. Sunday in the Music Auditorium.

The program, which includes choral works of various periods and styles, will feature the premiere of "Lament" by Jere Hutcheson, assistant professor of music.

"Lament" uses no text. Instead, the chorus sings "sounds" and uses extreme ranges of voice, tonal clusters, and other nontraditional singing effects.

Hutcheson explained that he employed sounds that are sorrowful and

which children might make spontaneously.

The result is what could be considered a "lament for a lost child." The composition resulted from his work with vocal color.

CELLIST

Guy Fallot, considered one of the world's great cellists, will be presented in a recital by the music department at 8:15 p.m. Tuesday, Feb. 13, in the Music Auditorium.

Fallot recently became acquainted with MSU through Dennis Burkh, who is on leave from the University and is guest conducting in Europe. Fallot, who was a soloist with an orchestra in Czechoslovakia conducted by Burkh, agreed to include MSU on his current concert tour.

A native of France, he now resides in Switzerland. He has completed his third world tour and now devotes much time to teaching and conducting master classes in cello in addition to his concert appearances.

Tuesday's concert is open to the public without charge.

MSU Positions Available

IMPORTANT: Administrative - Professional and Clerical - Technical applicants should contact the Employment Office at 353 - 4334 by February 13, 1973 and refer to the vacancy by the position number. Instructional staff applicants should contact departments noted.

FACULTY

Asst. Prof. of TV & Radio Dept. (Ph.D. to be completed by Sept. 1973) Undergraduate and graduate program; industrial economics and regulation (telecommunications field) or background in communications law. Experience in classroom teaching and academic research desired.

Robert Schlater, Chmn.,
TV & radio Dept.

Asst. Prof. in Counseling Center (Ph.D. to be completed by Sept. 1973) Counseling or clinical psychologist. Preparation for providing diagnostic and therapeutic assistance to University students with emotional conflicts. One year of supervised internship experience, preferably in a university, clinic, or medical setting.

Rowland R. Pierson,
Dir., Counseling Center

Asst. or Assoc. Prof. of Packaging (Ph.D. in Industrial Engineering, Agricultural Economics, Business of Economics with strong interest in the costs of distribution.) Teaching at the undergraduate and graduate level. Research on packaging and transportation costs related to packaging for the purpose of developing courses covering this area.

J. W. Goff, Director,
School of Packaging

Asst. or Assoc. Prof. of Science Education Research. Degree work in Educ. Research, Educ. Psychology or Science Education (Ph.D. or Ed.D.). To develop new doctoral program and support staff research projects.

Julian R. Brandou, Director,
Science and Mathematics Teaching Center
Instr. in Journalism (M.A. and willing to work on Ph.D.) Reporting and/or editing news. Minimum 5 years professional news experience.

Frank B. Senger, Chmn.,
Sch. of Journalism

Instr. or Asst. Prof. in Journalism (ABD - all but dissertation or Ph.D.) Magazine feature writing, editing; public affairs and advanced

reporting; or broadcast news. Minimum five years professional experience in area of journalistic specialization.

Frank B. Senger, Chmn.,
Sch. of Journalism

ADMINISTRATIVE - PROFESSIONAL

144. Asst. Placement Director III - (B.A. in appropriate field required) Work consists of placing liberal art students in business, industry, government and educational positions. Some work experience in business or industry highly desirable in order to provide competent assistance to MSU graduates. \$10,370 - 13,630

145. Programmer - Operator II - Should be experienced in a commercial or industrial computer operation. Knowledge of fortran language required. Must have ability to do programming and operate 1130 IBM computer. Good mathematical ability necessary. \$9,930 - 12,590

CLERICAL - TECHNICAL

146. Sr. Animal Husbandry Technician X - B.S. in Science with course work in chemistry, organic chemistry and bacteriology. Ability to operate and maintain a fermentation laboratory. Ability to operate and maintain a 25 horsepower steam generator, and industrial evaporator and spray dryer. To be responsible for conducting all fermentation studies in the laboratory. \$8,973 - 11,147

147. Sr. Department Secretary VII - Shorthand & typing 70 wpm. Knowledge of Univ. offices and business procedures desirable. Bookkeeping knowledge helpful. Ability to assume responsibility. Ability to supervise a clerical staff. \$6,660 - 8,272

148. Principal Clerk VI - Some medical secretary training desirable. Must be good typist and able to work with the public, keep clinical records, and type clinical reports. Will supervise student help. \$6,436 - 8,048

Data Preparation Operator I (1 vacancy), \$3.01/hour
Laboratory Research Aide (1 vacancy), \$2.93/hour

Departmental Secretary V (4 vacancies), \$6,367 - 7,389
Clerk - Typist II (3 vacancies), \$5,440 - 6,422

MICHIGAN STATE UNIVERSITY IS AN
EQUAL OPPORTUNITY EMPLOYER

Achievements

MELISSA BAILE, women's field hockey coach, has been named to a United States team which will compete in Europe this summer. The team will tour the Netherlands and England and take part in an International Field Hockey Conference.

CHARLES E. CLELAND, associate professor of anthropology and curator of anthropology at the Museum, was named president of the international Society for Historical Archaeology.

LYLE M. STONE, instructor in anthropology, anthropology research assistant at the museum and staff archaeologist for the Mackinac Island State Park Commission, was named to the executive board of the 300-member international organization at its recent meeting in St. Paul. The major goal of the society is preservation of archaeological and historical sites in the United States, Canada and other countries represented in the international membership.

JOHN H. FERRES, professor of American Thought and Language, presented his view of Canadian literature at the annual convention of the Modern Language Association in New York held recently.

RAY B. GUMMERSON, district extension specialist in resource development with the University's Upper Peninsula Extension Center at Marquette, recently received the Certificate of Merit Award from the Michigan Soil Conservation Districts, Inc. The award citation praised Gummerson for his "Outstanding contributions to the cause of soil and water conservation" throughout his professional career and for playing an important role in the establishment of the Upper Peninsula Resource conservation and Development Project.

JOHN R. WINCHESTER, coordinator of American Indian programs, has been elected vice chairman of the new Coalition of Eastern Native Americans. Winchester, a Potawatomi, will serve on the coalition's 11-member steering committee.

ROBERT L. GREEN recently received a plaque from the Lansing Branch of the NAACP, at the organization's annual banquet. The plaque read "in appreciation to Dr. Robert L. Green, director, Center for Urban Affairs, Michigan State University, for outstanding community leadership."

BULLETINS

TERRARIA

Floriculture students are selling terraria from 8 a.m. to 5 p.m. through Feb. 13 at the International Center bookstore, the Union, and the Horticulture Bldg. Proceeds will go towards a five-day field trip for the class.

RETIREEES CLUB

The MSU Retirees Club will meet on Monday, Feb. 12 for lunch in Old College Hall, in back of the Union Grill. Following the meal, the program will be presented in the club room on the third floor. The speaker will be John N. Winburne on "My First Hundred Years." All male retirees of MSU are invited.

THEATER TRIP

Reservations are now being taken for the MSU Business Women's Club theater trip on Saturday, March 31. The trip will include "Lorelei" with Carol Channing at Detroit's Fisher Theater and dinner at the Elmwood Casino in Windsor with a show including Glen Campbell. The cost is \$30 per person. For reservations, contact Virginia Ross, Dept. of Poultry Science.

AEBLESKIVER!

The MSU Faculty Women's Association's annual aebleskive luncheon will be held from 11 a.m. to 2 p.m., Saturday, Feb. 10 at All Saints Episcopal Church, 800 Abbott, East Lansing. Proceeds will go for scholarships.

ANTIQUE GROUP

The Faculty Folk Antique Group will meet at 9:30 a.m. Tuesday, Feb. 13 in the museum storage area under the stadium. Val Berryman, curator of historical artifacts at the museum, will speak on the classification and cataloging of antiques. Entrance to the area is on the east side of the stadium south of the gas pumps.

ADVERTISING CLUB

The MSU Advertising Club will host its annual Winter Program at 8 p.m. Wednesday, Feb. 14, in Union Parlor C. Attending will be advertising executives and personnel directors from ad agencies, newspapers, and broadcast media in Chicago and Detroit. The meeting will include a panel discussion, questions from the audience, and an informal cocktail party.

CONFERENCES

Feb. 12-16 Basic Life and Health Insurance Inst.

Feb. 12-16 Police Alcohol Training School VI

Feb. 12-16 Training Program for Michigan Alcoholism Coordinators

Feb. 12-13 Family Planning Conference

Feb. 14-15 Sugar Beet Conference

Feb. 15 Dermatology of Horses and Cattle, Vet. Clinic

Feb. 15-16 Michigan Natural Resources Council

All conferences will be held in Kellogg Center unless otherwise noted.

Students and faculty members are welcome to attend these continuing education programs. Those who are interested should make arrangements in advance with the Office of University Conferences, 5-4590.

EXHIBITIONS

Kresge Art Gallery

Faculty Exhibit through Feb. 25—Twenty-one faculty members exhibit their works in this annual show: John deMartelly, Roger Funk, Nan Stackhouse, James McConnell, Jens Plum, Owen Brainard, Allen Leepa, Robert Alexander, James Adley, William Gamble, Irving Taran, Karl Wolter, Louis Raynor, Mel Leiserowitz, James Fagan, James Lawton, Stacy Proffitt, Ralf Henricksen, Clifton McChesney, Alison McMaugh and Paul Love. On exhibit are oil and acrylic paintings, watercolors, prints, drawings, sculptures, jewelry and photographs. The gallery is open weekdays from 9 a.m. to 5 p.m., on Saturdays and Sundays from 1 to 4 p.m., and Tuesdays from 7 to 9 p.m.

Library

A new exhibit in the library features black achievement in the arts and collections of works of black poets in recognition of February's Black History Week.

Museum

"Sound of the Ax"—This exhibit traces the development of both the felling and broad ax from early European times to the 19th century. The American ax became probably the most important tool in the opening of our frontiers. Artisan's Hall, second floor.

SEMINARS

MONDAY, FEBRUARY 12, 1973

Photosynthetic reaction centers as objects of photochemical study. Roderick Clayton, Section of Genetics, Development and Physiology, Cornell U., 4 p.m., 136 Chemistry. **Biophysics.**

Transfer reactions induced by ^{16}O on ^{88}Sr . N. Anantaraman, Argonne National Laboratory, Chicago, 4:10 p.m., Cyclotron Laboratory Seminar Room. **Cyclotron.**

Stream ecosystem studies. Kenneth Cummins, 4 p.m., 244 Natural Science. **Entomology.**

Alterations in prolactin and LH control in the aged rat. Jean S. Euker, 4 p.m., 216 Giltner. **Physiology.**

Better homes for bryozoans. O.B. Nye, Dept. of Geology, Wayne State U., 4:30 p.m., 205 Natural Science.

TUESDAY, FEBRUARY 13, 1973

Polymer degradation: Some positive aspects. Lynn J. Taylor, Owens-Illinois, Inc., Okemos, 4 p.m., 284 Engineering. **Chemical Engineering.**

An evaluation of the dry-pack and ice-pack for shipping and storing fresh eviscerated chicken broilers. Richard Shantz, 4:10 p.m., 103 Food Science. **Food Science and Human Nutrition.**

The isolation and characterization of soybean proteins. Elizabeth Caputi, 4:10 p.m., 103 Food Science. **Food Science and Human Nutrition.**

Cut flower storage and postharvest life. William Carpenter, 4 p.m., 209 Horticulture. **Horticulture.**

Permanent employment in Japan: facts and fallacies. Robert E. Cole, professor of sociology, U. of Michigan, 3 p.m., 100 S. Kedzie. **Labor and Industrial Relations and James Madison College.**

On the experimental foundations of solid mechanics. James F. Bell, The Johns Hopkins U., 4:10 p.m., 312 Engineering. **Metallurgy, Mechanics and Materials Science.**

Mother-toddler interaction: the roads to competence. Wanda Bronson, 4 p.m., 145 Natural Science. **Psychology.**

Working women. Jacqueline Brophy and Collette Moser, 3 p.m., Captain Room, Union Bldg. **Social Work.**

On a combinatorial approach to confounding. Doyle Stewart, Upjohn Co., Kalamazoo, 4:10 p.m., 405A Wells. **Statistics and Probability.**

WEDNESDAY, FEBRUARY 14, 1973

Reactions catalyzed by liver microsomal NADPH Cytochrome C reductase. Steven Aust, 4 p.m., Pesticide Research Conference Room. **Pesticide Research Center and Biochemistry.**

Photosynthetic carbon metabolism in the corn plant. Martin Gibbs, Brandeis U., 4:10 p.m., 101 Biochemistry. **Plant Research Laboratory.**

The bank's approach to rural development. Montague Yudelman, International Bank for Reconstruction and Development, Washington, D.C., 3:30 p.m., 312 Agriculture. **Agricultural Economics.**

Recent advances in the biochemistry of nitrogen fixation. Robert H. Burris, Dept. of Biochemistry, U. of Wisconsin, 4:10 p.m., 101 Biochemistry. **Biochemistry.**

Heavy metal pollution. Bernard D. Knezek, 4 p.m., 309 Agriculture. **Crop and Soil Sciences.**

A study of the effects of installing and operating a large pumped storage project on the shores of Lake Michigan near Ludington, Mich. Charles R. Liston, 1:30 p.m., 223 Natural Resources. **Fisheries and Wildlife.**

Pre-obesity: Insulin sensitivity and lipogenesis in tissues of genetically obese mice. M. Kaplan, 12:30 p.m., 206 Food Science. **Food Science and Human Nutrition.**

Liapunov stability criteria. W.J. Gibbons, Argonne National Laboratory, 4:10 p.m., 304A Wells. **Mathematics.**

FRIDAY, FEBRUARY 9, 1973

- 7:30 p.m. Gymnastics—MSU vs. Oklahoma. Jenison Fieldhouse.
- 8 p.m. "Little Green Men"—The theory of extraterrestrial intelligent life in the universe is the topic of this continuing presentation in the sky theatre. Following the 8 p.m. shows, there will be a special session on the current sky with outdoor observation if weather permits. Abrams Planetarium.
- 8:15 p.m. "Hamlet"—The characters have become circus performers, using dance-like movements and gymnastics to physicalize the emotions present in an age-old classic. The play is under the direction of Fred Piegonski, a doctoral student in the Dept. of Theatre. A small admission fee will be charged at the door. Wonders Kiva.
- 10 p.m. "Little Green Men" (see above). Abrams Planetarium.

SATURDAY, FEBRUARY 10, 1973

- 10 a.m. Fencing—MSU vs. Wisconsin and Wisconsin-Parkside. IM Sports Arena.
- 12 p.m. Track—Michigan State Relays. Jenison Fieldhouse.
- 2:30 p.m. "Little Green Men" (see Feb. 9). Abrams Planetarium.
- 6:30 p.m. Track—Michigan State Relays. Jenison Fieldhouse.
- 8 p.m. World Travel Series—The famous Danish author and explorer Jens Bjerre presents his second authentic, uncensored documentary color film on "China—The Awakening Giant." In "The New China—After the Cultural Revolution," Bjerre explains what happened during the tumultuous years when the nation was completely sealed off from the outside world. Auditorium.
- 8 p.m. "Little Green Men" will be followed by a skywatching session (see Feb. 9). Abrams Planetarium.
- 8:15 p.m. "Hamlet" (see Feb. 9). Union Ballroom.
- 10 p.m. "Little Green Men" (see Feb. 9). Abrams Planetarium.

SUNDAY, FEBRUARY 11, 1973

- 4 p.m. Concert—In the first of two concerts this month in MSU's First International Festival, Czechoslovakian conductor Bystrík Rezucha with the MSU Symphony and mezzo-soprano Nedda Casei will present a program which includes Cesar Franck's "Symphony in D Minor," arias by Donizetti, Rossini and Saint-Saens, the premiere of "The Turning Mind" by H. Owen Reed of the music faculty, and the U.S. premiere of "Amoebae" by Josef Gresak. Fairchild Theatre.
- 4 p.m. "Little Green Men" (see Feb. 9). Abrams Planetarium.

- 8:15 p.m. "Hamlet" (see Feb. 9). Union Ballroom.
- 8:15 p.m. Concert—Under the direction of Robert Harris, the State Singers, MSU's 68-voice mixed ensemble, will present a program of choral works representing various styles and periods. Included will be the premiere of "Lament" by Jere Hutcheson, assistant professor of music. There is no charge for admission. Music Auditorium.

TUESDAY, FEBRUARY 13, 1973

- 12 p.m. University Club luncheon—Isabelle Payne, director of the MSU School of Nursing, will discuss "Nursing in the '70s: A Changing Role."
- 8 p.m. International folkdancing—Instruction will be followed by free dancing at 9 p.m. 327 M.A.C.
- 8:15 p.m. Recital—M. Guy Fallot, cellist. Music Auditorium.

THURSDAY, FEBRUARY 15, 1973

- 6 p.m. Women's intercollegiate basketball—MSU vs. Central Michigan. Women's IM Bldg.

FRIDAY, FEBRUARY 16, 1973

- 10 a.m. Board of Trustees meeting.
- 7:30 p.m. Hockey—MSU vs. Notre Dame. Ice Arena.
- 8 p.m. "Little Green Men" will be followed by a skywatching session (see Feb. 9). Abrams Planetarium.
- 8:15 p.m. Concert—Premieres of New Music. Erickson Kiva.
- 10 p.m. "Little Green Men" (see Feb. 9). Abrams Planetarium.

SATURDAY, FEBRUARY 17, 1973

- 1:30 p.m. Basketball—MSU vs. Purdue. Jenison Fieldhouse.
- 2 p.m. Women's intercollegiate gymnastics. MSU vs. Central Michigan. Women's IM Bldg.
- 2:30 p.m. "Little Green Men" (see Feb. 9). Abrams Planetarium.
- 7:30 p.m. Hockey—MSU vs. Notre Dame. Ice Arena.
- 8 p.m. "Little Green Men" will be followed by a skywatching session (see Feb. 9). Abrams Planetarium.
- 8 p.m. World Travel Series—Charles Forbes Taylor will discuss "Hawaii in the '70s." Auditorium.
- 10 p.m. "Little Green Men" (see Feb. 9). Abrams Planetarium.

BULLETINS

BRIDAL SHOW

Tickets are now on sale for the Floriculture Forum's ninth annual wedding and flower show, "Weddings: Then, There, Now" to be held at 7 p.m. Monday, Feb. 26. Tickets may be purchased at 109 Horticulture. Donation is \$1.25.

EARLY ENROLLMENT

Early enrollment for spring term begins Thursday, Feb. 15, in the Sports Arena of the Men's IM Bldg. and continues through Wednesday, Feb. 21. For detailed information concerning enrollment, see pages 9-11 of the spring term Schedule of Courses and Academic Handbook.

ARTHUR FLEMMING

Arthur Flemming, former Secretary of Health, Education and Welfare in the Eisenhower administration and currently Special Advisor on Aging to the President, will give an address "Current Trends in Aging," at 3:30 p.m., Friday, Feb. 9 in 102B Wells. The lecture will also be broadcast on closed circuit TV Channel 9.

LECTURE-CONCERT SERIES

Tickets are available now for the final two concerts on the Chamber Music Series in Fairchild Theatre: harpist Nicanor Zabaleta (March 6) and the violin-piano duo, Paul Zukofsky and Gilbert Kalish (April 6). The last two attractions have drawn sold-out houses well in advance of the concerts. Counter ticket sales open Feb. 14 for "Story Theatre" (Mar. 1, Broadway Theatre Series) and the Salzburg Mozarteum Orchestra with baritone Walter Berry (Mar. 2, Lively Arts Series and International Orchestra Series). Union Ticket Office hours are 8:15 a.m. - 4:30 p.m., weekdays, phone 5-3361.

OBEDIENCE CLASSES

The wives of veterinary students will sponsor basic dog obedience classes on Monday evenings beginning March 19. Enrollment fee is \$18. The class is designed to teach dogs home and yard manners. For information call Fran Schena, 349-3838.

TROPICAL STUDIES

The MSU Tropical Studies Group will meet at 12:30 p.m. Wednesday, Feb. 14 in 204 International Center. Malek Mangesha, dean of the College of Agriculture, Haile Saillasse University, Ethiopia, will discuss ICRISAT (International Crop Research Institute for the Semi-Arid Tropics).

HARRY BRIDGES

Four faculty members will review the book "Harry Bridges: The Rise and Fall of Radical Labor in the United States" by C.P. Larowe at 8 p.m. Thursday, Feb. 15 on the sunporch of the Union. Conducting the review will be John P. Henderson, professor of economics, Robert Wright, professor of American Thought and Language, George Hough, associate professor of journalism, and Bruce McCrone, instructor of social science.

AUFS LECTURER

Lecturer Norman Gall, a member of the American Universities Field Staff on Latin American studies, will be available for preliminary scheduling of courses and seminars Feb. 26 to March 2. He has written numerous articles of significant developments in the Caribbean and Andean areas, and his publications have appeared in "The Economist," "The Nation," "New York Review of Books," "The New Republic," and others. For information contact Charles Gliozzo, Dept. of Humanities, 3-5242.

Information on MSU events may be submitted for possible inclusion in the bulletins to Patricia Grauer, Dept. of Information Services, 109 Agriculture Hall, (517) 353-8819. Deadline for submitting information is noon Tuesday preceding the Thursday publication.