



# OU NEWS

## News briefs

Barbara Gaves, payroll, has released November and December payroll deadlines.

November and December monthly salary payrolls, deadline Nov. 11 pay date Nov. 26; deadline date, Dec. 5, pay date Dec. 23. Student payrolls for November, December, and the first pay date in January—deadline dates, Nov. 17, Dec. 1 and 15, and Jan. 12; pay dates Nov. 21, Dec. 4 and 19, and Jan. 16 (pay period Dec. 15 through Jan. 11). Hourly payroll for November and December—deadline dates Nov. 10 and 24 and Dec. 8 and 17; pay dates Nov. 14 and 26 and Dec. 12 and 23.

Dec. 1 is the deadline for applications for the Danforth Foundation Associate Program for Faculty. The project recognizes and encourages effective teaching and fosters activities which humanize teaching and learning. Associates are invited to three regional conferences with lodging and hospitality provided by the Danforth Foundation. Associates are eligible to apply for grant funds up to \$2,000 to assist in campus activities related to improving the quality of teaching and learning. Interested persons can contact Judith K. Brown, 523 Var or nomination forms can be obtained from the Danforth Associate Program at 222 S. Central Ave., St. Louis, Mo. 63105.

The annual blood drive was a success. Red Cross officials were more than pleased with a record 589 pints of blood donated by members of the OU community.

This year's OU Alumni Telefund set several new records including a 41% increase in the amount of dollars pledged by alumni and a 30% increase in the number of alumni pledging to the telephone campaign. Approximately 2,477 alumni pledged just over \$45,000 to the 1980 Alumni Telefund, as compared with 1913 alumni pledging just under \$32,000 during the previous year.

## Affirmative action letter

I hereby inform the university community that Barbara G. Murphy, the university affirmative action officer, has been charged with coordinating Section 504 of the Rehabilitation Act of 1973 and Title IX of the Education Amendments of 1972. She will serve as liaison for all inquiries from state and federal agencies regarding affirmative action policies and statistics.

I also hereby reaffirm the commitment of Oakland University to equal employment and educational opportunity and affirmative action. University policy prohibits discrimination on the basis of race, color, national origin, religion, sex, age, handicap, or Vietnam-era status in all university programs including recruiting, hiring, placement, promotion, reclassification, compensation, and admissions.

Ms. Murphy has been assigned responsibility to monitor the implementation of these policies as well as to take affirmative initiatives ensuring further progress toward our common goals of equality of education and employment opportunity for all members of the university community.

The Affirmative Action Office is located in Room 157-A, North Foundation Hall (377-3496). Margaret Geroux has been appointed secretary to Ms. Murphy.

I appreciate your cooperation in all affirmative action matters. I urge you to consult with Ms. Murphy as the university develops new procedures and activities.

George T. Matthews  
Interim President

## Grant for co-op program

The U.S. Department of Education has made a \$49,450 grant to the Center for Community and Human Development.

The funds will be used for a variety of purposes, including some travel, supplies and services, and expansion of the engineering co-op program, and in particular it will help OU move into a co-op program for liberal arts students explains William David Jaymes, center director.

James said the liberal arts program will be used for regular co-op experiences of alternating work and study and for field experiences, shorter term, often non-paying jobs.

A key aspect of the liberal arts program will be advising, Jaymes said, helping students link a desired area of study and a concentration so that a liberal arts student is more marketable. He cited a language major with an international management concentration as one example. A reputable study has shown that most managers in America today have come from arts and sciences backgrounds. The key is to make that liberal arts student acceptable for an entry level position in the system, Jaymes said.

A coordinator will be hired to develop the liberal arts co-op program.

# Research + teaching + service

Editor's note—This is another in the **OU News** series on academic units. Members of the Department of Mathematical Sciences share their research efforts and classroom philosophies with the university community.

**George F. Feeman**, Chairperson—Profound changes have been taking place in the mathematical sciences in recent times. They have begun to move the mainstream of activity away from the traditional pure areas of analysis, algebra, number theory, and topology toward the more applied areas of numerical analysis and methods, combinatorics, operational sciences, and statistics. At present, as we find ourselves in the midst of these changes, there exists a continuing strong balance in research activity across the spectrum of areas included in the mathematical sciences. However, with respect to student interest, funding capability, and employment opportunities, the balance has very much shifted toward computationally oriented mathematics. Thus, while pure mathematical research remains both of interest and of great value, the action on center stage has come to be dominated by the sounds of the applied areas. There is no doubt that the computer has been the force behind these changes, and it is equally certain that the intensity of these changes will increase during the last twenty years of this century.

It is fortunate that here at OU the Department of Mathematical Sciences has anticipated and flowed with these changes during the past decade. Evidence of this lies in the fact that, while the department has doubled in number of faculty and in credit delivery since 1970, its scholarly interests have expanded to include work in the major applied areas with the maintenance of a strong overall balance, its programs at both undergraduate and graduate levels have come to include degree work across the same spectrum, and its outreach within the Oakland University community and to the outlying communities and industrial organizations has been greatly expanded. In short, the changes which have occurred in the Department have fully reflected those which have been occurring on the larger scene. The brief summaries of our various areas of activity given here should help to provide a broad picture of our unit and demonstrate that we have been active participants in the mathematical revolution of our time.

**Irwin E. Schochetman**, Scholarly Activities Coordinator—The department exerts a substantial effort in supporting and stimulating strong scholarly activities at all levels and in diverse directions. Its output in terms of scholarly papers, monographs, and books is impressive, given its size and teaching emphasis. For example, since 1976, twenty-three department faculty have published a total of sixty articles. An equal

number of articles have been accepted for publication and are waiting their turn to appear in print. Two research monographs have been published by Irwin Schochetman in the American Mathematical Society's prestigious series of *Memoirs*, and books have been published by Louis Nachman and Donald Malm. Areas of activity and tenure track faculty working in them are as follows:

**Algebra:** C. Cheng, J. Froemke, J. McKay, S. Wang, Y.C. Wu  
**Analysis:** B. Barron, L. Bragg, J. Dettman, D. Downing, D. Schmidt, I.E. Schochetman, S.K. Tsui, J.B. Turett, S. Wright  
**Applied Mathematics:** B. Cahlon, J.C. Chipman, W. Hoffman, D. Malm, L.J. Nachman, N. Shoemaker  
**Combinatorics:** J. Grossman  
**Statistics:** H.J. Arnold, S. Perla  
**Mathematics Education:** G.F. Feeman

With eighty-three percent of these faculty having published in the last three years, the department has achieved a higher percent of involvement than any other mathematics department in Michigan and stands in the top ten percent among non-Ph.D. departments in the country. Overall, the quality, quantity, and diversity of its research effort rank it in Michigan next only to the big three—Michigan, Michigan State, and Wayne State—in prestige.

A strong colloquium series, seminar activity, conferences, and a Statistical Consulting Service are integral parts of our scholarly work. Non-mathematicians from related disciplines have been encouraged to speak on their mathematical problems in the colloquium series. The department has organized and hosted five conferences in the last two years. These were in Numerical Analysis, Algebra, Topology, Banach Space Theory, and  $C^*$ -Algebras. The  $C^*$ -Algebra Conference was funded by the National Science Foundation. In spring 1981, the department will host the annual meeting of the Michigan Section-Mathematical Association of America. The Statistical Consulting Service has been offered since 1974 as a free service to the Oakland University community to improve the quality of statistical research. Professors Arnold and Perla have provided assistance to numerous users of statistics in the implementation of various research projects in education and the natural and social sciences, including contributions to the doctoral dissertations of three Oakland faculty and administrators.

In addition, the department has expanded its interdisciplinary scholarly activities off campus through greater scholarly interaction with industrially based mathematicians. Along with these developments has come an increase in our search for outside funding. Currently pending with the National Science Foundation is a Visiting Scholars Proposal for an amount in excess of \$400,000, presented as a contribution to NSF's new program for finding alternate modes of support for high

quality research. Should it be funded it will permit us to bring to the campus outstanding mathematical scientists on a residential basis, which in turn will bring the university increased recognition and visibility.

**J. Curtis Chipman**, Graduate Activities Coordinator—The graduate programs offered by the department are several and include at the same time some of the university's oldest as well as its newest programs of graduate study. Among the oldest are the Master of Arts in Mathematics and the Master of Arts in Teaching in Mathematics; the Master of Science in Applied Mathematics and the Master of Science in Applied Statistics, were both initiated in the fall of 1979.

The new master's programs represent a direction in graduate education in the mathematical sciences which is not only unique locally, but uncommon nationally as well. Typically, the master's degree in mathematics represents but a resting place (or an exit point) on the road to a Ph.D. The desirability of a master's degree which is the product of a specifically designed, self-contained program of study has recently been argued. The development of such programs has been supported by federal funds at Clemson, RPI, and Washington State University. In its applied graduate programs our department has followed these developments, but expects to make its own contribution to this trend by the implementation of such programs in a much more heavily industrialized area of the country. The degree recipients will gain employment in industrial or governmental positions that require such technical expertise.

To assist in the development of these and other applied programs the department has appointed as Adjunct Professors a Committee of Industrial Advisers which consists of professional mathematicians and statisticians who are in leadership positions in their respective settings. In addition to contributing to the construction of applied programs which strike a good balance between immediate training needs and longer term educational objectives, these industrial advisers have provided a continuing link between the department and a community of scholars who have expertise in modern applications of the mathematical sciences. It is quite possible that, in time, this interaction will lead to the development of new types of doctoral level programs.

**Donald G. Malm**, Undergraduate Programs Coordinator—With respect to undergraduate education, the department plays a university-wide role. Its strength and expertise are essential to the quality of the university. The undergraduate program in the department is extraordinarily large and diverse. This fall semester department faculty

# Van Pool Program now available

In an effort to lower commuting costs for members of the OU community, to reduce highway congestion, and to conserve fuel, Oakland University is offering a commuter van pool program in areas where there is sufficient interest.

Van pools are voluntarily formed by persons living within a reasonable distance of one another who agree to drive together to and from work or place of study. One person serves as the driver-coordinator who maintains the vehicle, collects the monthly fees, and arranges in consultation with the van pool members the route and times of pickup. In exchange the driver has personal use of the van.

Transportation experts say van pooling is becoming the fastest growing form of transit as employees and employers discover its energy and cost saving benefits. According to the National Association of Van Pool Operators, one 12-passenger van travelling 50 miles per day could replace eight private cars, conserve 5,388 gallons of gasoline per year, and keep more than two tons of pollutants from the air.

During the spring of 1980 a group of Oakland University employees volunteered as part of a Van Pool Pilot Project to test the viability of that concept for Oakland University. The university is now ready to begin a program. Each formed van pool will use a vehicle provided by Van Pool Services of the MichiVan Program. Each van pool will begin with a new vehicle. MichiVan will provide a 12 or 15-passenger van to transport van pool members to and from work locations, select a driver/coordinator and back-up driver to operate the van, and provide for insurance, licensing, and maintenance of the van. The cost of the van pool will be computed according to the daily round trip miles the vehicle travels and the number of passengers. A minimum of nine persons is required to form a pool. Persons who are interested in sharing the cost of commuting to and from Oakland University should fill out the form below and return it to the CIPO office. An informational meeting will be held for all persons interested, on Friday, November 14, in room 129 Oakland Center.

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## COMMUTER VAN POOL INTEREST SURVEY

I am interested in becoming a member of a Van Pool.

I would like to be a

Driver

Passenger

Either

Name \_\_\_\_\_

Address \_\_\_\_\_

Nearest major cross streets \_\_\_\_\_

Department \_\_\_\_\_ Office Phone # \_\_\_\_\_ Arrive OU \_\_\_\_\_ Leave OU \_\_\_\_\_  
(Time) (Time)

Mail to: Van Pool, c/o CIPO, 49 Oakland Center

# = excellence

are teaching more than 4,300 students for more than 12,000 undergraduate credits in mathematics and statistics. In addition to courses for its own majors, the department offers courses for students in the following university programs: Computer and Information Science, Elementary Education, Engineering and the Sciences, Industrial Health and Safety, Management, Medical Technology, Nursing and Physical Therapy. It is also deeply involved in the interdisciplinary Applied Statistics Concentration, and its faculty regularly teach courses in the Computer and Information Science program. It is responsible for the field supervision of students who desire secondary level teaching certification in mathematics and has cooperated on several ventures with the Continuing Education program.

Such a dynamic role requires a highly qualified faculty which is open to new situations and ideas, which we are fortunate to have. Our undergraduate program is constantly being reviewed and revised to better serve our students and the needs of society. Whereas ten years ago most students who studied mathematics planned to go on to graduate school, today there is great demand in industry for graduates with bachelor's degrees in mathematics. Our undergraduate programs have been modified to reflect these changes. The department now offers two bachelor's degrees, the traditional B.A. and the more recently implemented B.S. degree. The B.S. degree gives students a thorough grounding in the types of mathematics most useful to them as users of mathematics in industry. Students who have graduated with a B.A. have no trouble finding excellent jobs with such companies as Michigan Bell, General Motors, and the Ford Motor Company.

In recent years, as more and more programs in the university have come to require mathematics background, the department has seen a great expansion in its pre-calculus courses. This term, typical of our on-going efforts to provide the best possible service to the students, the department is piloting a computer-graded system for the Algebra I and II courses. This system, which is based on a specially designed set of problems, has been developed with the help of a grant from the Teaching and Learning Committee. While the quality of the courses has been raised, the preparation of the students for their chosen programs has also been enhanced. This concern for proper preparation of students and coordination of programs marks our effort at all undergraduate levels.

In the next few years the department plans to continue to strengthen its offerings in the applied areas of mathematics. This will require the acquisition of computer graphics equipment and continuing support of our faculty in their scholarly efforts in applied areas.

**Student Activities:** In addition to its program offerings, the Department of Mathematical Sciences serves students in a variety of ways throughout their university careers. One of the more visible general services is the drop-in tutoring program. This program is run solely on departmental funds as a supplement to the work of the Skills Development Center. It provides qualified tutors on a daily basis and is open to all students in lower level mathematics courses. The program has been very successful. Not only have a large number of students have been helped, but some advanced students, the tutors, have had an opportunity to reinforce their own skills and gain valuable teaching experience.

As yet another service to the students, the department sponsors a Math Club, for which leadership has been supplied by David Downing, J. Barry Turett, and Steve Wright from the faculty and by Kate Hallett for the students. The main goals of this organization are to acquaint students with some of the professional opportunities to be found in the mathematical sciences and to show them some of the interesting and enjoyable aspects of the field not otherwise found in courses. Past meetings have included field trips to industrial organizations and talks by industrial mathematicians. It is expected that a chapter of Pi Mu Epsilon, a national honors society in mathematics, will be established in this academic year. Three students—Kate Hallett, Barbara Vano, and Darren Wilson—gave talks at the national meeting of Pi Mu Epsilon, held in September at Miami University in Ohio.

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## OU team on site visits to AASCU schools

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Frederick W. Obear, academic vice-president and provost, has chosen a faculty team to participate in the Institutional Exchange Program sponsored by the American Association of State Colleges and Universities. The team is on its first site visit.

Oakland University members are Dave Bricker, human and educational services; Donald Falkenburg, engineering; Egbert Henry, biological sciences; Donald Morse, English and learning skills; Jacqueline Scherer, sociology; David Shantz, psychology; David Stevens, communication arts; and W. Patrick Strauss, history.

The team is now at the University of Missouri at St. Louis. Also participating in the Nov. 5-8 visit are Manuel H. Pierson, dean of student services; and John Tower, acting director of the Center for General and Career Studies.

For students who are interested in solving difficulty problems, the department offers a problem seminar course and fields a team to compete in the Putnam Mathematical Competition. This is a nation-wide competition open to all undergraduates in any college or university. The weekly problem sessions held prior to the exam as part of the course have contributed to our success in this competition. Jerrold Grossman and James McKay have served as team coaches.

The department's commitment to student growth and development extends to pre-university levels as well. For the past several years, the department has hosted one of the regional parts of the State Middle School Math Competition and has participated in the conduct of the Senior High School Math Prize Competition. Each year for the past three years the department has conducted a full day workshop on mathematical modeling for 300 honors math students from the six Metro Suburban League High Schools. This event is held at Troy Athens High School and consists of talks and competition. Through its Oakland's Honors College is promoted. Finally the department has taken interest in talented younger students in mathematics through conduct of Math and Computer Camps which are held in the summer for grade school and junior high school students. These camps, which have been organized by Professor Wanda Mourant, have been partially funded by the National Science Foundation and have been quite successful. It is hoped that they can be continued and expanded in the years ahead, as we attempt to serve both the community and ourselves.

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## Center offers exchange options

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Faculty members whose teaching and research interests for the 1981-82 academic year might benefit from affiliation with an academic institution elsewhere in the United States or in a few foreign countries are reminded of Oakland University's membership in the Faculty Exchange Center. The center, based in Pennsylvania, coordinates faculty exchanges between member colleges and facilitates temporary academic relocation. Participating faculty maintain their appointments, salaries, and professional perquisites while teaching at community colleges, colleges, or universities elsewhere. Housing exchanges can also be arranged through the center. Any OU professor interested in the program should request information and registration materials from Jane Eberwein in the provost's office.

# CALENDAR

\* 'Our Town' \*

\* Nov. 6-9 \*

\* MB Theatre \*

\* 377-3310 \*

\* Paul Zimmer \*

\* Poet \*

\* Nov. 10 \*

\* 1 p.m. \*

\* Gold Room, OC \*

**FRIDAY, NOVEMBER 7**

8:30 am to 4:30 pm Advance Registration, 161 NFH  
 1 to 5 pm Ideas In Evolution, Meadow Brook Art Gallery  
 2:15-3:30 pm School of Engineering Seminar Series, 202 DH  
 7 pm Workshop, "You are Special," OC  
 7 and 9:30 pm Film, "Electric Horseman," 201 DH  
 8 pm Pontiac-Oakland Symphony, Varner Recital Hall  
 8 pm "Two by Two," Studio Theatre  
 8:30 pm "Our Town," Meadow Brook Theatre  
 8:30 pm "Car On A Hot Tin Roof," Barn Theatre

**SATURDAY, NOVEMBER 8**

8:15 am "Preschool and Early Childhood Ed. Conf., Oakland Center  
 1 and 5 pm "Return of the Dragon," 201 DH  
 2 pm "Our Town," Meadow Brook Theatre  
 8:30 pm "Car On A Hot Tin Roof," Barn Theatre  
 9 pm Dance, Gold Rm. A B C

**SUNDAY, NOVEMBER 9**

1 to 5 pm Meadow Brook Hall Tours  
 6:30 pm "Car On A Hot Tin Roof," Barn Theatre  
 6:30 pm Black Coffee, Studio Theatre  
 6:30 pm Our Town, Meadow Brook Theatre

**MONDAY, NOVEMBER 10**

8:30 am to 6:30 pm Advance Registration, 161 NFH  
 1 pm Paul Zimmer, Poetry Reading Series, Gold Rm. A

**TUESDAY, NOVEMBER 11**

8:30 am to 6:30 pm Advance Registration, 161 NFH  
 noon Film, One AM and A Trip to the Moon, OC  
 6:30 pm Carnal Knowledge, Gold Rm. OC,  
 7:30 pm —The Italo-American Experience, Schillace and Ms. Luella Baron, Rm. 435 WH  
 8:30 pm Our Town, Meadow Brook Theatre

**WEDNESDAY, NOVEMBER 12**

8:30 am to 6:30 pm Advance Registration, 161 NFH  
 2 pm Our Town, Meadow Brook Theatre  
 8:30 pm Our Town, Meadow Brook Theatre

**THURSDAY, NOVEMBER 13**

8:30 am to 6:30 pm Last day of Advance Registraton, 161 NFH  
 6 pm Ms. OU Talent Contest, Varner Recital Hall  
 8 pm Black Coffee, Studio Theatre  
 8:30 pm Play, Our Town, Meadow Brook Theatre  
 noon Murray Turoff and Starr Roxanne Hiltz, Gold Rm., OC  
 7:30 & 9:30 pm Sympathy for the Devil, 201 DH  
 8 pm Black Coffee, Studio Theatre  
 8 pm Afram Jazz Ensemble, Varner Recital Hall  
 8:30 pm Our Town, Meadow Brook Theatre  
 8:30 pm Car On A Hot Tin Roof, Barn Theatre

**SATURDAY, NOVEMBER 15**

6 & 9:30 pm Our Town, Meadow Brook Theatre  
 6 & 9:30 pm Two by Two, Studio Theatre  
 7 & 9:30 pm Life of Brian, 201 DH  
 8:30 pm Cat on a Hot Tin Roof, Barn Theatre

**SUNDAY, NOVEMBER 16**

1 to 5 pm Meadow Brook Hall Tours  
 2:30 pm Two by Two, Studio Theatre  
 2:30 & 6:30 pm Cat on a Hot Tin Roof, Barn Theatre  
 3 pm OU Concert Band, Varner Recital Hall  
 6:30 pm Our Town, Meadow Brook Theatre

**TUESDAY, NOVEMBER 18**

8:30 pm Our Town, Meadow Brook Theatre

**WEDNESDAY, NOVEMBER 19**

11 am Film, Build Your Own Solar Greenhouse, Exhibit Lounge, OC  
 2 pm Sven Adnderson: Jazz Band, Fireside Lounge, OC  
 1 pm Two by Two, Studio Theatre  
 2 pm Our Town, Meadow Brook Theatre  
 8 pm Concert, Orange Lake Drive, Varner Recital Hall  
 8:30 pm Our Town, Meadow Brook Theatre

**THURSDAY, NOVEMBER 20**

8 pm Two by Two, Studio Theatre