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# History of the Department of Extension Education

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## DEPARTMENT HISTORY

The University of Missouri is rich in the tradition of public higher education. Founded in 1839 as the first state university west of the Mississippi River, the University has had a distinguished history of contributing to society through its teaching, research, and service roles.

The University fulfills its teaching mission by blending traditional academic programs with professional schools to levels beyond the doctor of philosophy degree.

The University's research mission conducts many nationally prominent programs, including the 10 mega-watt nuclear research reactor center, the water resources program, the environmental trace substance center, and a laboratory-farm facility for studying chronic diseases and aging.

Dedicated to extending to all Missourians the knowledge found in its faculties, libraries, and laboratories, the University service (extension) mission has been helping Missourians since the University became a land-grant institution more than a century ago.\*

The Department of Extension Education was formally created by action of the Board of Curators of the University on June 8, 1960 by the following resolution:

"BE IT RESOLVED that there be and is hereby established in the College of Agriculture a department to be known and designated as 'Department of Extension Education' which shall offer work in various phases of extension work, the staff of the department shall include the staff of the Agricultural Editor's Office, State 4-H Club, and State Extension Agents, as well as others to be added on recommendations of the Dean and approval of the President."

This resolution has been the basis for the operation of the Department of Extension Education. According to the action, the department is charged with the responsibility of offering academic work in the various phases of extension, as well as providing an academic home for the Agricultural Editor's Office staff, State 4-H Club staff, and others designated by the dean and approved by the president.

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\**Campus Columnns*, Sept. 15, 1978, University of Missouri Columbia

## Academic Work

Prior to the creation of the department there was a long history within the College of Agriculture of offering undergraduate work in extension.

The announcement of the College of Agriculture course offerings in 1928-1929 included three courses in agriculture and home economics extension. These courses were 100 f&w, Field Work in Agricultural Extension; 110 f&w, Field Work in Home Economics Extension; and 200 f&w, Special Problems in Agricultural and Home Economics Extension. These courses were taught by Arthur John Meyer, director of the Cooperative Extension Service, and Essie Margaret Heyle, state leader of home economics.

The field work courses were laboratory courses of a period not less than six weeks. The special problems included studies in such areas as:

1. effectiveness of organized and unorganized communities in carrying out extension programs;
2. relative effectiveness of different types of extension teaching;
3. methods of measuring results of extension work;
4. the place of local leadership in the extension program;
5. systems of training local extension leaders;
6. methods of financing extension programs;
7. fundamentals of cooperation with outside agencies in the conduct of extension work, together with studies of all other factors that influence the effectiveness of extension activities.

These early courses were focused on the problems encountered in carrying out the extension function. In the 1931-32 announcement, the same courses were listed as in 1928-29 with Cannon Hearne, state extension agent, and Heyle as instructors.

In 1937, the degree of Master of Arts in Agricultural Extension was established. E. T. Itschner, extension dairy specialist, was the first to receive the degree. His degree was awarded in 1938.

In the 1938-39 academic year, the courses offered in agricultural and home economics extension were more sharply defined. Still offered were 100s,f&w, Field Work in Agricultural Extension (5), Hearne; 110s,f&w, Field Work in Home Economics Extension (5), Amy Kelly, state extension agent. A new course, 200s, Extension Methods (2), was taught by Hearne. This course was designed for



E.T. Itschner, extension dairy specialist, was the first to receive the degree of Master of Arts in Agricultural Extension in 1938.

experienced extension workers. It was aimed at studying the relative influence of teaching methods from the point of view of reaching and teaching more people.

Also new was course 202s, Organization and Planning of Extension Work (2), taught by Hearne. It considered program determination, teaching plans, and ways of measuring extension progress.

Course 201s,f&w, Special Studies in Agriculture and Home Economics Extension (2-5), was taught by Hearne.

Courses were renumbered and revised in the 1945-46 academic year. Graduate level courses appeared for the first time.

Courses offered included:

- 100 Field Work in Agricultural Extension (5)f,w,s, taught by T.A. Ewing, extension associate professor;
- 101 Home Economics Extension Methods, (2)f, taught by Florence Harrison, professor of home economics; (2)w, taught by Rena Jenkins; extension assistant professor;
- 102 Field Work in Home Economics Extension (5)f,w,s, taught by Kelly and Charity Bye Shank, county home economics agent;
- 400 Special Investigations (arr)f,w,s, taught by Hearne;

- 401 Extension Methods (2)s,  
taught by Hearne;
- 402 Organizing and Planning of Extension Work (2)s,  
taught by Hearne;
- 409 Research (arr)f,w,s,  
taught by Hearne.

The courses 401 and 402 were offered in the summer for the first time.

The next change in academic offerings was in the 1950-51 academic year. The undergraduate courses were renumbered with 201, Apprentice Training in County Home Agent Work (4)w,s; and 202, Apprentice Training in County Agricultural Extension Work (4)w,s. Enrollment was by permission only. Students enrolling must have completed their junior years in college to be eligible to enroll.

The graduate level offerings included 400, 401, and 402 as in the previous offerings. A new course 404, Extension Evaluation (2)s, was offered in 1950-51. Research 490 (arr) was renumbered to 450 Research (arr).

In 1951-52 a new course 210, Agricultural Services (3)w, was added to the curriculum. It was taught by A.A. Jeffrey and Ovid U. Bay of the Agricultural Editor's Office. It dealt with the study of mass communications media and visual teaching aids available to workers serving agriculture.

The graduate program had been a Master of Arts program until 1953. At that time it was changed to a Master of Science degree program. No change was made in the course offerings.

Increased numbers of students enrolling in agricultural extension courses gave impetus for a separate department to be established. During 1959, 18 students were awarded the Master of Science Degree in Agricultural Extension. This was the largest number in any department of the Division of Agricultural Sciences. There were 70 students who had made application for the degree and were expected to complete it within the next four years.

Consequently, the Board of Curators took action on June 8, 1960 to establish the Department of Extension Education. J. H. Longwell, dean of the Division of Agricultural Sciences, and C. Brice Ratchford, dean of the Extension Division and director of the Cooperative Extension Service, were officially informed of this action.

The degree offered by the department was changed from Master of Science in Agricultural Extension to Master of Science in Extension Education as of Jan. 1, 1961.

F. E. Rogers was appointed as the first chairman of the new department. He served until his retirement in 1962. Stirling Kyd was department chairman from July 1, 1962 until Sept. 1, 1966.



**Jack Rogers**



**Stirling Kyd**

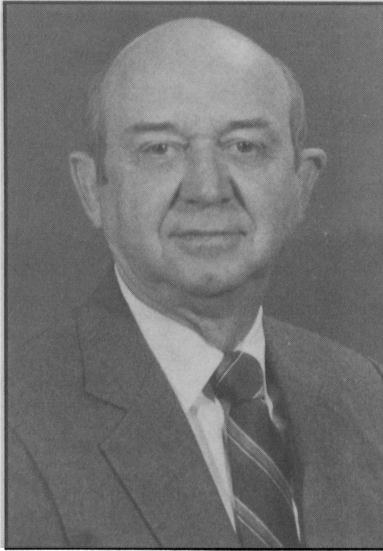
Undergraduates were advised in the department until 1963, when it was determined that it was more appropriate for undergraduates not to consider themselves as having a major in extension, but that they should elect specific subject matter degrees.

In 1966, Randel Price became chairman of the department. He served as chairman until 1972, when he became the University-wide extension director of training and staff development.

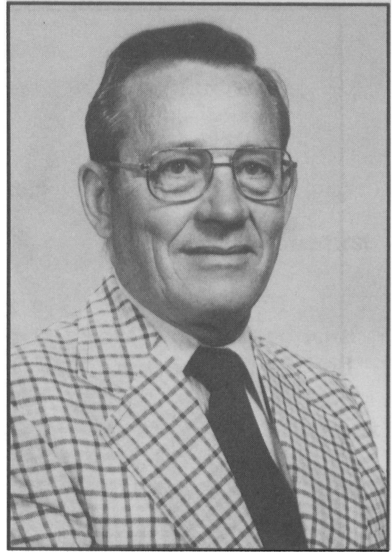
Since the late 1950's, a considerable number of international students have enrolled in the department. The program that originally gave emphasis to the training of international students was the contract the University of Missouri had with the Indian government to develop an agricultural university in Bhubaneswar, India. In the ensuing years, more than 50 students from India received Masters of Science in Extension Education.

In 1972, John G. Gross was named chairman of the Department of Extension Education and director of graduate studies. He served until 1983. At that time, the curriculum consisted of the following courses:

- 150 Problems (arr)s,f,w;
- 210 Fundamentals of Communications (3)f&w;
- 400 Problems (arr)s,f,w;
- 401 Principles and Procedures of Extension Teaching (3)f;
- 403 Program Development and Evaluation (3)w;
- 405 Extension Organization and Administration (3)f;
- 406 Fundamentals of Extension Teaching of Adults (3)f,w;



**Randel Price**



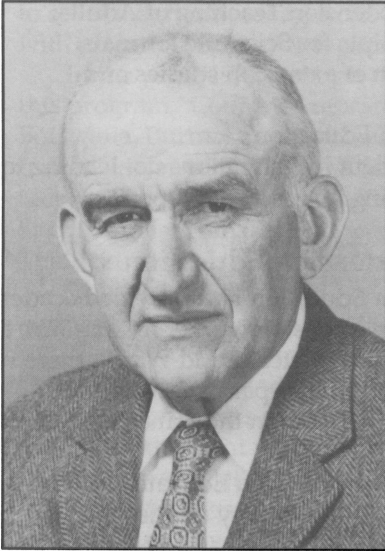
**John G. Gross**

408 Preparing Manuscripts for Scientific Journals (3)f,w;  
410 Seminar (1)f,w;  
450 Research (arr).

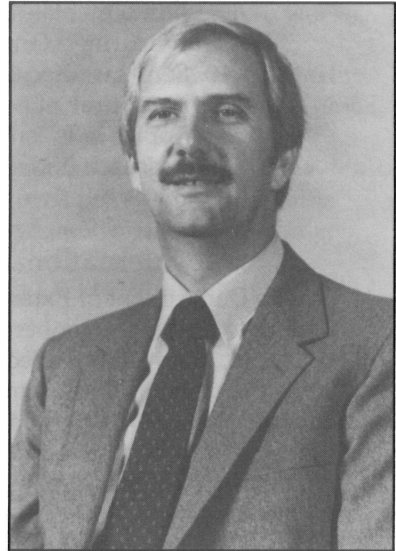
These courses continue to be listed in the academic offering of the department. In 1977-78, a 160 Seminar was added to give academic training to persons interested in nontraditional study. This course was taught by John Mowrer, who joined the department in 1974 as assistant professor and director of the Nontraditional Study Program in Agriculture. In 1972, a 300 Problems courses was added to serve those interested in agricultural journalism. Also added in the 1970, was the course 411, Topics in Extension Education, was added to try academic programs that may later be incorporated into regular departmental offerings.

During the 1970s several doctoral candidates in other disciplines chose Extension Education as an outside support area in their doctoral programs. Students working on doctorates in animal husbandry, dairy husbandry, rural sociology, agricultural education, agronomy, higher and adult education, curriculum and instruction, educational administration, and other areas selected Extension Education as a support area. The academic work to comprise a support area included Extension Education 406, Fundamentals of Extension Teaching of Adults; Extension Education 405, Extension Organization and Administration; Extension Education 403, Program Development and Evaluation; and Extension Education 400, Problems. This 12-hour block comprised the basic work





**Richard L. Lee**



**Gregory Nolting**

required to blend the extension function with the academic work of their major departments.

In 1983-84, Richard L. Lee was appointed interim chairman of the department and John Mowrer was appointed director of graduate studies. In 1985, Gregory Nolting was hired as an assistant professor and given the appointment of director of graduate studies following Mowrer's retirement. Lee was named chairman in 1986 and continued in that role until his retirement Aug. 31, 1988. Nolting was named department chair in September 1988.

Courses currently offered (1988) include:

- 150 Problems (for agricultural journalism majors);
- 160 Seminar (designed for nontraditional students not on campus);
- 210 Fundamentals of Communication;
- 220 Extension Education as Applied in Cooperative Extension Service - An Overview of Cooperative Extension;
- 300 Problems (for agricultural journalism majors);
- 306 Extension Communication Principles and Their Applications;
- 320 Agricultural Media;
- 400 Problems (independent investigation of Extension Education problems);
- 403 Program Development and Evaluation;
- 405 Extension Organization and Administration;

- 406 Fundamentals of Extension Teaching of Adults;
- 408 Preparing Manuscripts for Scientific Journals;
- 410 Seminar (discussion of extension studies and literature);
- 411 Topics in Extension Education;
- 450 Research (independent investigations not leading to a thesis but terminating in a research report).

### International Extension Education

The Department of Extension Education had provided academic training to enable the cooperative extension worker in Missouri, and the nation, to do a more effective job. After World War II, there was interest in developing agriculture in other parts of the world. Students came from many countries to learn the principles that had been successful in this country.

The international dimension of Extension Education was given an early impetus by the contract the University of Missouri had with India to develop the University of Agriculture and Technology at Bhubaneswar, India. Many students came from India and more than 50 enrolled in the graduate program. Students from other countries were sent to the University of Missouri by national and international agencies, including the Agency for International Development, the World Bank, and others.

Almost 100 Master's degrees have been awarded to students from foreign countries. These countries include Afghanistan, Bangladesh, Cameroon, China, Colombia, Ecuador, Egypt, Ethiopia, Germany, Greece, India, Indonesia, Iran, Iraq, Kuwait, Libya, Lesotho, Malawi, Malaysia, Morocco, Nepal, Nigeria, Pakistan, Panama, Philippines, Saudi Arabia, Scotland, Sri Lanka, Sudan, Tanzania, Thailand, Vietnam, and Zimbabwe.

The international outreach of the department was expanded in 1974 when a course was organized with the Agency for International Development called "Development and Operation of Agricultural Extension Programs" TC-110-5.

This program was a nine-week summer program for students studying in American universities to: (1) examine principles underlying extension education; (2) compare extension program delivery systems; and (3) determine the relevance of extension concepts when applied to a student's home country situation.

Members of the teaching, research, and extension staffs of the University of Missouri—including both resident and field personnel—served as resources. Farm families also participated as well as professional staff members of several public and private farmer service institutions.

A part of this training included time spent on campus, field trips

to several agricultural agencies and firms, and at least two weeks with extension field agents over the state.

In the years 1974 through 1985, more than 200 were trained in this program. Countries represented included Bangladesh, Bolivia, Botswana, Burma, Cameroon, Chad, Ethiopia, Gambia, Ghana, Indonesia, Jamaica, Kenya, Korea, Lesotho, Malawi, Malaysia, Mali, Nepal, Niger, Nigeria, Philippines, Portugal, Republic of China, Saudi Arabia, Somalia, Sri Lanka, Sudan, Swaziland, Tanzania, Thailand, Uganda, Vietnam, Yemen, and Zambia.

In 1982, a graduate student, Michael Mziray, made a survey of participants in the program. He found:

The training course has been able to activate and set in motion the training processes of the individual participants over the eight years under this study. Participants work left behind in their records and their feelings about the course as found in their responses in this study demonstrate that most of their interests and needs were met. This fact is also confirmed by the long list of kinds of activities in the form of changes, improvements, and ideas they are implementing in their work situation.<sup>1</sup>

This summary statement describes very well the success and rating of this program.

### Evaluations and Service Activities

Evaluation of extension work has been an activity of the Department of Extension Education. One of the requirements for the master's degree was to complete an independent investigation either as a special problem or research. Many of these investigations were evaluation studies.

The many studies in the files were of value to active extension workers. In 1969, a publication of selected studies and research papers was started under the title "Training and Staff Development Special Reports." These special reports were summaries of research and evaluation studies completed by students in the department. Also included in the series were summaries of theses and

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<sup>1</sup>Michael Mziray, "Evaluation of the Course in Development and Operation of Agricultural Extension Programs (TC-110-5)", Extension Education Study No. 326, University of Missouri, Columbia, Mo., 1975-1982, p. 95.

dissertations done by members of the Missouri extension staff at other universities. A list of these studies is included in the Index.

Distribution of this series was made to all extension centers in Missouri; U.S. Department of Agriculture Extension Service; other universities with extension education training; and to staff development officers of extension in each state.

In addition to this, the staff of the department conducted several special studies as a service to extension. This included providing consulting services to staff in the preparation of evaluation instruments as well as conducting special studies.

In 1975-76, John Gross was on special assignment to the program and staff development unit of the Federal Extension Service, U.S. Department of Agriculture. While on that assignment he wrote "An Evaluation Planner for Extension."

Special studies included Evaluation of Expanded Food and Nutrition Programs in Missouri and Baseline Studies in Extension Areas of Missouri (Kaysinger, Lakes Country, Green Hills, Mid-Missouri, Missouri Valley, and Mark Twain Areas).

Staff members of the department have served on the evaluation committee of several national conferences and projects.

One of the standard textbooks of extension work was *The Cooperative Extension Service* by Kelsey and Hearne. Hearne was a Missouri extension worker who later joined the Federal Extension Service in Washington, D. C.

In 1984, *Adult Education Through The Cooperative Extension Service* was published by the University of Missouri Cooperative Extension Service. This book was written by Warren Prawl and Roger Medlin, both of Kansas State University, and John Gross, professor emeritus of extension education. This book updated the Kelsey-Hearne book and added chapters dealing with international extension as well as 1890 land-grant college extension activity.

### Educational Specialist

A graduate study option was developed between departments in the College of Education and the Department of Extension Education in 1988.

The program allows the awarding of the Educational Specialist degree with an emphasis in Extension Education. Linda Wulff, area youth specialist, Mexico, was awarded the degree at the UMC August 1988 Commencement and was the first University Extension specialist to complete the degree program. Wulff received the specialist degree from the Department of Agricultural Education.

The emphasis for the study option originated from John Oren, vice provost for extension, in 1986 soon after he came to the University of Missouri. Oren held the dual roles of associate vice



Linda Wulff, center, was the first to receive the Educational Specialist. With her are Bob Stewart, chair of the Department of Agricultural Education, and Gail Imig, UM associate vice president for academic affairs-Extension.

president for academic affairs - extension at the University-wide level, and vice provost for extension on the Columbia campus.

Oren's interest was two-fold. He wanted to provide another opportunity for professional improvement for the University Extension field staff. He also had a rich background in agricultural and extension education at Ohio State University and Mississippi State University prior to entering extension administration as director of cooperative extension at New Mexico State University. Oren came to Missouri from New Mexico in 1985.

Oren suffered a severe heart attack and took an extended sick leave in 1986 and the option was developed by Roger L. Mitchell and W. R. Miller, deans of the Colleges of Agriculture and Education respectively. Staff work was carried out by Steven W. Graham and Gregory Nolting, assistant professors of education and extension education respectively, and Richard L. Lee, department chair.

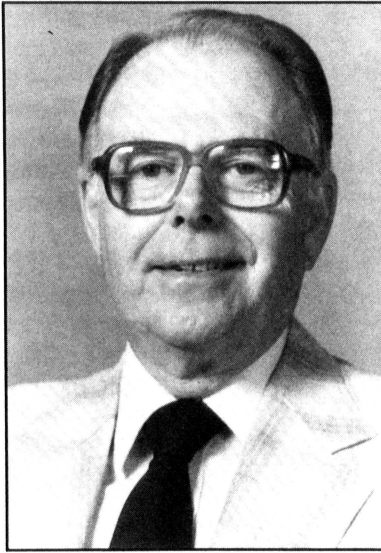
University Extension specialists receiving the specialist degree are awarded a \$1,000 increase in their base pay.

## NONTRADITIONAL STUDY PROGRAM IN AGRICULTURE

### Introduction

Established in 1974 with grant funds from the W. K. Kellogg Foundation and a pledge of support by the University of Missouri College of Agriculture, the Nontraditional Study Program (NSP) in Agriculture is an academic program within the Department of Extension Education.

John L. Mowrer was appointed the first director of the Nontraditional Study Program on Oct. 1, 1974. Mowrer had an extensive background in agricultural education having taught



**John L. Mowrer**

even come to campus for regular instruction. Implicit in most nontraditional, experiential, and/or external degree programs is a commitment to recognize, by the award of appropriate college credit, the learning which the student brings to the learning situation.

It is important to note that credit is awarded for learning, not experience, and that credit is awarded only upon satisfactory documentation of learning. In the Nontraditional Study Program in Agriculture, prior learning may be documented by scoring above the 50th percentile on the College Level Examination Program (CLEP) examinations, either general or subject matter depending on the level of learning being measured and upon the number of college credit hours the student already has; departmental examinations prepared by professors in the department; interviews by appropriate professors; and the writing of a portfolio of prior learning. The portfolio of prior learning must be a well-written paper discussing the learning experiences the student has had and identifying and documenting the learning that came out of these experiences. The paper is evaluated by appropriate professors. In all cases, except for CLEP, which is a nationally standardized examination, the learning is evaluated and the credit awarded by faculty member(s) who teach on campus in the area(s) being evaluated.

Nationally there are several hundred programs known variously as nontraditional, experiential, external degree, and other similar names. At present, there are only two such programs in agriculture.

vocational agriculture at St. Joseph and Unionville. He held a PhD. from the University of Missouri in adult and higher education. And at the time of his appointment, he was a continuing education specialist at the University's School of Medicine.

The Nontraditional Study Program in Agriculture is an attempt to meet the higher educational needs of persons who do not fit the mold of the more traditional college age student (19-22), and who because of work, family, and other commitments find it difficult or impossible to be full-time students and perhaps to

These are the Nontraditional Study Program in Agriculture at the University of Missouri-Columbia and the External Degree Program in Agriculture at the University of Wisconsin, River Falls. The latter program was patterned after the UMC Program and the director of NSP and staff conducted faculty workshops in Wisconsin and hosted Wisconsin faculty on visits to UMC while the program was being developed.

The primary professional organization identified with experiential learning programs such as NSP, is CAEL, Council for Advancement of Experiential Learning. Approximately 300 colleges and universities hold membership in this organization and the director of the NSP holds a professional membership in CAEL. The director has also represented the University at national meetings of CAEL and has appeared on the program of CAEL at three national meetings and one regional workshop. Gregory Nolting, while an intern in NSP, appeared on the program of CAEL at Atlanta, Ga. The director of NSP has frequently been a contributor to CAEL literature and has participated in two CAEL research projects.

Nationally, Missouri's NSP program would rate as one of the best available. This assessment is based on the academic quality of the course offerings, student evaluations, and how well the NSP meets the suggested criteria for evaluating quality in nontraditional programs. The following criteria are used in evaluating such programs and the NSP utilizes all of them.

- ◆ Builds on previous learning of the students.
- ◆ Allows student to proceed at own rate.
- ◆ Encourages student to systematically study individual concern.
- ◆ Places heavy responsibility on student for individual effort.
- ◆ Uses a variety of delivery systems.
- ◆ Tries to bring professors to the learning situation at the convenience of the student.
- ◆ Satisfies the requirements of its external publics.
- ◆ Has standards and evaluations set by responsible faculty with input from students and practitioners.
- ◆ Provides individual guidance and advisement.
- ◆ Uses assessment procedures based on appropriate norms.
- ◆ Employs the expertise of external colleagues.
- ◆ Admits and enrolls every day.

It is difficult to compare NSP with other such programs because most nontraditional and external degree program are found in the liberal arts and/or business; but it is the belief of those knowledgeable about the NSP that it is a high-quality, academic program.

There was a time in the early to mid-seventies when

nontraditional/experimental programs were being established at a rather alarming rate. Legislatures were establishing new institutions to serve a new clientele, via new methods, techniques, and with different philosophies. Private schools, church related schools, entrepreneurial schools, as well as public institutions such as the University of Missouri, were getting into the business of nontraditional education.

In some cases it was "the money to be made" that furnished the motivation for these new institutions; in others it was the "desire to survive" in a period of declining numbers of college-age students; for some it was a legitimate and worthy desire to meet the higher educational needs of adults and other groups seemingly overlooked and bypassed by existing educational institutions. Many programs have fallen by the wayside and those that remain are for the most part assisting in meeting the needs of these new and different students. Just as there are differences in educational philosophy, concepts, and academic quality among the regular programs of higher education institutions, so there are differences in nontraditional programs.

The trend at this time seems to be toward increasing access, improving quantity and quality of course offerings, and being sure that credit awarded is based on documented learning of college level. The NSP from its inception has directed its efforts toward accomplishing increased access, improved quantity and quality of course offerings, and awarding credit for prior learning only when the learning is of college level, relevant to the degree sought, and is documented to the satisfaction of appropriate faculty.

### Program Description

The University of Missouri is a land-grant institution with a three-fold mission of teaching, research, and extension. The UMC College of Agriculture is the statewide institution for education in agriculture with high-quality teaching programs, at both the graduate and undergraduate levels, equally as high-quality research programs, and nationally recognized extension programs. The NSP is an integral part of the College of Agriculture and is administratively housed in the Department of Extension Education.

Students completing degree requirements through NSP receive the same degree as those completing the degree requirements through the campus residence program. The emphasis in the Nontraditional Study Program has been on the use of a wide variety of methods and techniques in making available to students the knowledge and expertise of the resident and extension faculty of the College. There has been no change in course requirements for the degree. The change has been in the methods utilized to meet the



degree. The "time and space" requirements of semester-based, classroom/laboratory learning have been, for the most part, removed or liberalized. A frequently heard, catchy phrase describes NSP as permitting students to proceed at their own pace at their own place.

Within the College of Agriculture, NSP relies on the regular faculty of the various departments of the College to provide the course content and teaching expertise. NSP has no faculty. Frequently, NSP has called upon faculty expertise in other schools or colleges within the University to evaluate prior learning which students have brought with them to the program.

Robert H. Best, Sedalia, was the first to receive an undergraduate degree through the Non-Traditional Study Program in 1975. The following news release was prepared and distributed May 9, 1975 by the Agricultural Editor's office to take note of the milestone.

#### VETERAN SOIL CONSERVATIONIST FIRST TO GRADUATE IN UMC NON-TRADITIONAL STUDY PROGRAM

COLUMBIA, Mo. - Married and 50 years old.

Four children ranging in age from seven to 24.

A World War II veteran.

Holder of a full-time job with the U.S. Department of Agriculture's Soil Conservation Service for the past 21 years.

Hardly the description of today's average college graduate, is it?

But, then Robert H. Best, Sedalia, is not the average 1975 graduating college senior in other ways either.

When Best receives his bachelor of science degree from the College of Agriculture at the University of Missouri-Columbia May 10 he will complete a long-standing personal goal and, at the same time, be the first College of Agriculture graduate ever in a new Nontraditional Study Program.

The College of Agriculture Nontraditional Study Program provides interested and qualified students the opportunity to complete a degree even though they may not be able to attend classes on campus as do full-time students.

Applicants were accepted for the program late in 1974. Best was one of the first accepted, according to John Mowrer, director of the Nontraditional Study Program for the College of Agriculture. The unique program is supported in part by a five-year grant from the W. K. Kellogg Foundation, Battle Creek, Mich.

The idea of a nontraditional study program was first proposed three years ago by College of Agriculture Dean Elmer R. Kiehl and Associate Dean Homer Folks. Also instrumental in developing the program was John Gross, chairman of the college's Department of Extension Education.

Kiehl said that Best's feat offers encouragement to hundreds of others who have the goal of completing an interrupted college education. The program, he said, is another effort of the College of Agriculture to meet the needs of Missourians.

Best's story is not an unusual one. He first enrolled at the University in

1941. After a short time in college he enlisted in the U.S. Navy and served during the war years of 1943 to 1946. He returned to college in 1946.

"In 1948 I became a 'dropout'," Best said. "I left the University with 113 hours — 15 short of the required 128 hours for a College of Agriculture degree — to take a job as a veteran's on-the-farm instructor at Bethany."

"I taught for six years and then joined the Soil Conservation Service in 1954," he said. "I've been with SCS since that time."

Currently, Best serves as area conservationist for SCS administrative area three — a 14-county unit in west central Missouri. From his office in Warrensburg, he supervises the work of about 45 SCS professionals working in the 14 counties.

Although he does not necessarily expect a promotion as the result of obtaining his degree, it does make new opportunities possible.

Best has always intended to complete his work for a degree. Since he worked in Warrensburg he had checked the possibility of getting a degree from Central Missouri State University. But, CMSU requirements would have made the process a long one for a part-time student.

Best heard about the Nontraditional Study Program two years ago and checked the possibilities of completing his UMC degree at that time. Once the program was approved by the UMC College of Agriculture faculty, Best was one of the first to apply.

Since Best's primary interest is soil conservation, he was assigned an adviser in the College's Department of Agronomy — Prof. Kenneth L. Larson. Larson, along with fellow agronomy professors Earl Kroth and George Wagner, worked with Best to complete a study program that was accepted by agricultural faculty.

In addition to the 113 hours he completed at UMC almost 30 years ago, Best added 17 hours from three other colleges and universities that he had completed at various times.

This past semester, working under the direction of Chris J. Johannsen, associate professor of agronomy, and Glenn A. Gillespie, chairman of the Department of Recreation and Park Administration, Best completed two three-hour UMC problems courses to complete requirements for his degree.

As a result Best, along with 230 other 1975 graduating seniors, received his B.S. degree from the College of Agriculture nearly 34 years after first enrolling as a freshman.

Mr. and Mrs. Best live at 2701 Clarendon Road in Sedalia. They have four children. Steve, 24, is a graduate of Oregon State University and teaches in junior high school at Sedalia; 21-year-old Marsha is a senior at Southwest Missouri State University; and Mike is a 19-year-old freshman at UMC. Seven-year-old Scott isn't concerned about college at this point.

At the current time Mowrer said 14 students have been admitted to the Nontraditional Study Program. Others have applications on file and many others have inquired about the program.

"Nontraditional study is not an easy way to complete work on a college degree," Mowrer pointed out. "Most nontraditional students put in greater effort than their counterparts on campus, and the cost is also greater."

"At the same time it does permit Missourians outstate to continue their education," he said. "There are many people like Bob Best who have a long-

standing goal to obtain a college degree.”

Nontraditional students may earn college credit in a variety of ways, Mowrer said, but all efforts must be approved by the College of Agriculture faculty.

NSP provides access to the undergraduate program of the college and is not a graduate program. However, at least two former students of NSP have gone on to graduate school at UMC, received a master's degrees and are now employed by University Extension. One of those former students is now enrolled in a Ph.D. program at UMC. Another NSP student is dually enrolled in the University through NSP and in the Graduate School. Several other graduates of NSP have gone to other graduate schools including Harvard, North Carolina State, and the University of Hawaii.

NSP works closely with the extension teaching efforts of the University in assisting to arrange off-campus credit offerings and in securing students to enroll in such courses. NSP depends upon many members of the extension field staff to recommend prospective students, arrange meeting sites, assist in arranging off-campus courses and in some cases to serve as adjunct professors for special problems (with consent of departments and the Extension Division). One or two members of the extension field staff have served on the NSP advisory committee from its beginning.

Primarily, NSP is concerned with undergraduate teaching but NSP staff have been actively involved in research directed at adult learning and teaching methods and in improving the techniques of assessing prior learning. One doctoral thesis was concerned with learning as documented in NSP. Several courses offered through NSP are approved for graduate credit and have been used frequently for this purpose.

NSP students are encouraged to assist resident and extension faculty in the conduct of research on their farms or other places of business. Research in fertilizers, growth hormones, and carcass quality of beef animals has been carried on by NSP students under the direction of resident faculty assisted by extension field staff. A slide/tape series developed by an NSP student with assistance from the Department of Food Science and Nutrition and an extension animal husbandry specialist comparing live animals and carcass quality has been used by the state youth staff in training 4-H judging teams.

Frequently, resident faculty indicate that they have received valuable information and data from working with NSP students and they have been able to use this in their resident classes. Some NSP students have been asked to speak to on-campus classes in order to bring practical knowledge concerning current problems and possible solutions to the class.

## Internship Program

One of the difficulties encountered in staffing the Nontraditional Study Program in Agriculture was that there was no pool of qualified/experienced applicants from which to draw. Included in the original grant request to the Kellogg Foundation was a request for funds to defray the cost of two internship positions within the Nontraditional Study Program. The internships were for two years each and during the five-year period of the grant, four interns completed the program.

LaVeta Anderson (Ph.D. in Adult Education); Gregory Nolting (Ph.D. in Agricultural Education); Jean Zwonitzer (Ph.D. candidate in Higher/Adult Education); and Floyd Wright (Ph.D. in Plant Pathology) completed internships. Dr. Anderson spent several years as a representative for the Missouri Dairy Association, working with school and out-of-school groups, primarily in northeastern Missouri. Nolting is now chair and assistant professor of the Department of Extension Education and director of extension education graduate study at the University of Missouri-Columbia. Previously, he had responsibility for designing and implementing a program entitled "Development of an Individualized and Group Instructional Program Based on Financial Management for Adult/Young Farmers in Vocational Agriculture Programs in Missouri" and also taught F470, In-service Course in Agricultural Education. For five years, he held positions related to education and management training in Farmland Industries and with A. O. Smith Company.

Jean Zwonitzer is now coordinator of Career Information and Placement of the School of Business, University of Missouri-Columbia. Wright is now a regional director for University Extension, and has served as professor of agronomy and interim dean of the School of Agriculture, Arkansas State University at Jonesboro, Ark. Both Nolting and Wright served in the capacity of education and curriculum design specialist in the Nontraditional Study Program following completion of their doctorates. These positions were made possible by a grant from Kellogg and resulted in the redesign of some 25 College of Agriculture courses so that the courses could be used by NSP students studying in independent situations.

Interns have studied the literature of nontraditional/experiential education; attended state, regional, and national meetings of professional groups involved in nontraditional/experiential education; given talks based on research of the literature and on data gathered from Missouri's nontraditional students; and co-authored articles published in such journals as *Alternative Higher Education* and the *Journal of Extension*. They have also worked quite closely with NSP students and prospective students and with various

clientele groups throughout the state. Interns have also worked with the faculty, staff, and extension field staff regarding NSP.

In addition to the intern positions funded by Kellogg, two graduate students in higher and adult education have taken internship for credit in the Nontraditional Study Program. Also for the past several winter semesters, the NSP director has offered a 1-3 hour seminar in nontraditional study.

The primary objective of the internship program was the education and training at the doctoral level of potential faculty and administrators for nontraditional programs. Interns have gained valuable experience during the internships and this experience seems to have been helpful to them in their present positions.

With more than 50 graduates in the past 10 years and approximately 100 active students presently enrolled, NSP seems to be an accepted and recognized program of the College of Agriculture. Certainly, it is a modern-day continuance of the mission and philosophy of the land-grant university.

## IMPROVEMENT OF TEACHING PROGRAM

The College of Agriculture Teaching Improvement Program was a part of the Department of Extension Education until its termination in 1988. E.K. Leslie, associate professor of extension education, had primary responsibility in this area.

### Rationale

Teaching is a complex set of activities which is part of a university's basic raison d'être. Many University faculty, though highly qualified in their academic discipline, have no or little training in teaching skills. To assist faculty in improving their teaching skills should result in a higher-quality education for students. With this rationale in mind, the College of Agriculture began a teaching improvement program in 1968 under the leadership of Leslie, an educational psychologist.

Just as teaching skills are many and varied, teaching deficiencies are, likewise, many and varied. Since it would be impossible for one person to be active in all areas of potential improvement, the field of Leslie's activities had to be delineated. Dean of Resident Instruction Homer Folks recognized the pressing need for an improved test scoring and analysis program and directed that one be established. Thus, the Teaching Improvement Program had as its core a test analysis service coupled with a teacher evaluation questionnaire analysis service.

The test analysis service was one of the most sophisticated and fastest in the country, serving approximately 50 agriculture; forestry, fisheries and wildlife; and home economics faculty annually.

Likewise, the student teacher evaluation program served a compa-

rable number of faculty using a questionnaire that was developed at the University of Illinois.

A third component of the teaching improvement program involved the processing of questionnaires for faculty, administration, extension, graduate students, and undergraduates. These questionnaires involved many and varied purposes: faculty research, Ph.D. candidate thesis research, undergraduate course research, biographical surveys, attitude measurement, program evaluation, and dean of agriculture candidate screening.

Other aspects of the program involved faculty and teaching assistant workshops, a teaching improvement newsletter, class critiquing visitations, an educational research library, and a consultation service. With varying emphases, these teaching improvement services were offered through the winter semester of 1986.

The most recent emphasis involved a greatly expanded teacher evaluation service using a student questionnaire which was developed through the College of Agriculture Instructional Improvement Committee: Student Teacher/Course Evaluation (STCE). This instrument has 33 items and was used in approximately 125 agriculture courses by approximately 3,000 students per semester. Use of the form is on a voluntary basis though highly recommended. Instructors receive a copy of the results not only for their own course, but for their department and the entire college as well.

A companion form (Student Early Feedback Questionnaire) is a short version of the STCE, which is designed to be administered about six or seven weeks into a semester. Such student feedback can be used by an instructor to modify his/her teaching for the students who provided the information.

Another major emphasis in the teaching improvement program involved a monthly seminar series. All faculty and teaching assistants were invited to participate and a variety of topics was presented: motivation, testing, learning in the classroom, lecture, discussion, grading, and other related topics.

A third primary emphasis involved the video taping of an instructor at work, teaching a class. At the same time, a departmental colleague and an instructional technician sit in the class so as to provide the instructor with critiques from two distinct points of view. This entire activity was designed to help an instructor with his/her formative evaluation and self-improvement of teaching. All proceedings were confidential.

An additional area in which an attempt was made to begin an active program involves "teaching related research." The goal was to encourage faculty to conduct and publish research involving teaching as well as research in their academic specialties.

The aforementioned activities made up the bulk of the teaching im-

provement program in the College of Agriculture when it was terminated early in 1988.

## DEPARTMENT FUTURE

There are presently two faculty members with a percentage of their appointments designated to teaching courses in the department. Richard McCallum, Ph.D. from Nebraska, with several years of extension field work, and Gregory Nolting, Ph.D., are active in teaching and coordinating courses. The remainder of the teaching faculty come from staff who have academic appointments in the department but have responsibilities in administrative functions for University Extension. It appears the department will continue with this staffing pattern to incorporate current philosophy and practices of extension into the academic area.

Foreign countries continue to be represented in the department with students studying for the M.S. degree. These students comprise approximately one-fifth of the 35 students currently under advisement. Class enrollments have been good with a mixture of students from other disciplines. In 1987 students were enrolled from agricultural education, agricultural engineering, animal science, child and family development, community development, curriculum and instruction, and higher/adult education departments. Their continued support is appreciated and complements their efforts in developing qualified graduates. In 1987 the International Extension Field School was started and the course continues a successful tradition at Mizzou.

The Nontraditional Study Program continues to serve farmers and agribusiness, allowing men and women in the state and nation to obtain the B.S. degree in agriculture without returning to campus. A true example of the land-grant mission, this unique program represents the College of Agriculture for a national educational award this year.

The department continues to serve as an academic home for numerous University of Missouri-Columbia and University Extension faculty. As of Sept. 1, 1988, 40 faculty held academic appointments in the Department and that number included representation from several University divisions.

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MASTER'S DEGREES IN EXTENSION EDUCATION have been granted to the following persons by the University of Missouri. (Master of Arts prior to 1953; Master of Science since 1953)

NAME	MAJOR PROFESSOR	YEAR
1. E.T. Itschner	C.C. Hearne	1938
2. Wendell Holman	C.C. Hearne	1939
3. Webb Embrey	C.C. Hearne	1942
4. Pauline Hotchkiss	C.C. Hearne	1946
5. Ted Joule	F.E. Rogers	1947
6. Dorris Brown	F.E. Rogers	1947
7. Kenneth Huff	F.E. Rogers	1947
8. Ruth Muhlman (Mrs. Robert C. Turner)	F.E. Rogers	1947
9. Herman J. Putnam	F.E. Rogers	1948 (June)
10. Albert Hagan	F.E. Rogers	1950 (February)
11. Jaya Patel	F.E. Rogers	1951 (February)
12. Walter L. Smith	F.E. Rogers	1951 (February)
13. June Harris Burn	F.E. Rogers	1951 (June)
14. A. Aleta McDowell	F.E. Rogers	1951 (June)
15. O.K. Anderson	F.E. Rogers	1951 (August)
16. Luella Pratt	F.E. Rogers	1952 (February)
17. C.M. Christy	F.E. Rogers	1952 (June)
18. James D. Meyers	F.E. Rogers	1952 (June)

NAME	MAJOR PROFESSOR	YEAR
19. J.L. Treat	F.E. Rogers	1952 (June)
20. Bryan Phifer	F.E. Rogers	1952 (June)
21. Miller Hunter	F.E. Rogers	1952 (June)
22. Henry Chikasue	F.E. Rogers	1952 (August)
23. Ovid Bay	F.E. Rogers	1952 (August)
24. Norman Holman	F.E. Rogers	1952 (August)

MASTER OF ARTS DEGREE CHANGED TO MASTER OF SCIENCE DEGREE - 1953

25. David D. Jackson	F.E. Rogers	1953 (February)
26. Sybil Guthrie	F.E. Rogers	1953 (June)
27. Lloyd L. Rutledge	F.E. Rogers	1953 (June)
28. Stanley Spangler	F.E. Rogers	1953 (June)
29. Sheikh Patwari	F.E. Rogers	1953 (August)
30. Bunki Kumabe	F.E. Rogers	1953 (August)
31. Coy G. McNabb	F.E. Rogers	1953 (August)
32. John Douglas	F.E. Rogers	1953 (August)
33. Haji Ahmed Mughal	F.E. Rogers	1954 (February)
34. Mohammed I. Khan	F.E. Rogers	1954 (February)
35. Mustafa Mohy-ud-Din-Sayed	F.E. Rogers	1954 (February)
36. Raymond A. Kimmel	F.E. Rogers	1954 (February)
37. Herbert Rolf	F.E. Rogers	1954 (February)

NAME	MAJOR PROFESSOR	YEAR
38. George P. Rowe	F.E. Rogers	1954 (February)
39. Richard L. Wehrman	F.E. Rogers	1954 (June)
40. Ryland A. Miller	F.E. Rogers	1954 (June)
41. Robert L. Bridges	F.E. Rogers	1954 (June)
42. Frank Graham	F.E. Rogers	1954 (June)
43. James Vard Worstell	F.E. Rogers	1954 (August)
44. S.C. Bohanan	F.E. Rogers	1954 (August)
45. John B. Terwillinger	F.E. Rogers	1954 (August)
46. Antonios L. Adamopoulos	F.E. Rogers	1954 (August)
47. Saad Zahgloul Nagi	F.E. Rogers	1954 (August)
48. Rokuro Yamaguchi	F.E. Rogers	1954 (August)
49. Harold A. Sterrett	F.E. Rogers	1955 (February)
50. Dorman Claud Brookey	F.E. Rogers	1955 (February)
51. George Robert Dawson	F.E. Rogers	1955 (February)
52. Nelson G. Trickey	F.E. Rogers	1955 (February)
53. Alistair Campbell	F.E. Rogers	1955 (February)
54. Virgil E. Crawley	F.E. Rogers	1955 (August)
55. James W. Perry	F.E. Rogers	1955 (August)
56. Carl N. Scheneman	F.E. Rogers	1955 (August)
57. Bruce D. Walker	F.E. Rogers	1955 (August)
58. Duane Wheatley	F.E. Rogers	1955 (August)

NAME	MAJOR PROFESSOR	YEAR
59. William H. White	F.E. Rogers	1955 (August)
60. Ambrose Winn	F.E. Rogers	1955 (August)
61. Marcus Holman	F.E. Rogers	1956 (February)
62. Robert B. Baker	F.E. Rogers	1956 (June)
63. Ray F. Culver	F.E. Rogers	1956 (August)
64. Annabelle J. Dickinson	F.E. Rogers	1956 (August)
65. Burton S. Horne	F.E. Rogers	1956 (August)
66. Hugh E. Keith	F.E. Rogers	1956 (August)
67. George H. Schmitt	F.E. Rogers	1956 (August)
68. Roy T. Young	F.E. Rogers	1956 (August)
69. Clay Little	F.E. Rogers	1957 (August)
70. Harold Owens	F.E. Rogers	1957 (August)
71. L.J. McMillan	F.E. Rogers	1957 (August)
72. Estel Hudson	F.E. Rogers	1957 (August)
73. Henry Seften	F.E. Rogers	1957 (August)
74. William R. Summitt	F.E. Rogers	1957 (August)
75. Schell Bodenhamer	F.E. Rogers	1957 (August)
76. Clarence E. Burgett	F.E. Rogers	1957 (August)
77. Gilmer Dehn	F.E. Rogers	1957 (August)
78. William L. Niedwimmer	F.E. Rogers	1958 (June)
79. Vincent A. Raaf	F.E. Rogers	1958 (June)



NAME	MAJOR PROFESSOR	YEAR
80. Melvin A. Rowoth	F.E. Rogers	1958 (June)
81. Willis E. Davis	F.E. Rogers	1958 (August)
82. Roland L. Netzer	F.E. Rogers	1958 (August)
83. James C. Price	F.E. Rogers	1958 (August)
84. Bert Catron, Jr.	F.E. Rogers	1958 (August)
85. Thomas G. Brown	F.E. Rogers	1959 (February)
86. Ralph W. Schaller	F.E. Rogers	1959 (February)
87. Audra Rogers Robertson	F.E. Rogers	1959 (June)
88. Rex Randall Campbell	F.E. Rogers	1959 (June)
89. Katherine Brittingham	F.E. Rogers	1959 (June)
90. Lawrence A. Lindstrom	F.E. Rogers	1959 (June)
91. Richard S. Mann	F.E. Rogers	1959 (June)
92. Kagdosj Chandra Singh	F.E. Rogers	1959 (June)
93. Paul Ellis Lineberry	F.E. Rogers	1959 (August)
94. Stayros Christou	F.E. Rogers	1959 (August)
95. Sumitra Jiwanrao Palve	F.E. Rogers	1959 (August)
96. Dakshina Ranjan Sarker	F.E. Rogers	1959 (August)
97. Lingaraj Misra	F.E. Rogers	1959 (August)
98. Gurmail Singh Gill	F.E. Rogers	1959 (August)
99. Constantine J. Yanniris	F.E. Rogers	1959 (August)
100. Walter D. Russell	F.E. Rogers	1959 (August)

NAME	MAJOR PROFESSOR	YEAR
101. Virgil Wayne Lane	F.E. Rogers	1959 (August)
102. Gregorio Gurerreo Melegrito	F.E. Rogers	1959 (August)
103. Eileen Gibson	F.E. Rogers	1960 (January)
104. Bill C. Robinson	F.E. Rogers	1960 (January)
105. William A. Gates	F.E. Rogers	1960 (June)
106. Stanley H. Hoit	F.E. Rogers	1960 (June)
107. Wayne C. Thomas	F.E. Rogers	1960 (June)
108. Drue E. Anderson	F.E. Rogers	1960 (August)
109. Gail I. Bank	F.E. Rogers	1960 (August)
110. Carrol L. Kirtley	F.E. Rogers	1960 (August)
111. Walter F. Heidlage	F.E. Rogers	1960 (August)
112. Thurman S. Wren	F.E. Rogers	1960 (August)
113. Ronald Gene Dedert	F.E. Rogers	1960 (August)
114. Fred W. Zimmerman	F.E. Rogers	1961 (February)
115. Glinda B. Leach	F.E. Rogers	1961 (February)
116. Allan Sudholt	F.E. Rogers	1961 (February)
117. Muruli Sarma	F.E. Rogers	1961 (February)
118. H.S.M. Channabasaiah	F.E. Rogers	1961 (June)
119. Sudhir Chandra Nagbiswas	F.E. Rogers	1961 (June)
120. Maheshwar Sinha	F.E. Rogers	1961 (June)
121. Chester D. Black	F.E. Rogers	1961 (August)

NAME	MAJOR PROFESSOR	YEAR
122. Donald H. Broerman	F.E. Rogers	1961 (August)
123. Donald C. Burk	F.E. Rogers	1961 (August)
124. Laxmi Shanker Srivastava	F.E. Rogers	1961 (August)
125. Sailendra Nath Bezborah	F.E. Rogers	1961 (August)
126. Akhauri N.P. Sinha	F.E. Rogers	1961 (August)
127. A. Adiva Reddy	F.E. Rogers	1962 (February)
128. Navnitlal M. Patel	F.E. Rogers	1962 (February)
129. Leon Chilton	F.E. Rogers	1962 (February)
130. Paul D. Burgess	F.E. Rogers	1962 (June)
131. Leonard D. Ernsbarger	F.E. Rogers	1962 (June)
132. Donald C. Rains	F.E. Rogers	1962 (June)
133. Ann H. Turnage	F.E. Rogers	1962 (June)
134. Prabhakar T. Gupta	F.E. Rogers	1962 (June)
135. Namasayya B. Hiremath	F.E. Rogers	1962 (August)
136. Arumana M. Tampai	F.E. Rogers	1962 (August)
137. Digambar Pradhan	F.E. Rogers	1962 (August)
138. Pillappa Hanumappa	F.E. Rogers	1962 (August)
139. John G. Gross	F.E. Rogers	1962 (August)
140. Jennie D. Simpson	F.E. Rogers	1962 (August)
141. P.S. Damodaran Nair	F.E. Rogers	1962 (August)
142. Don Merrill Hinds	F.E. Rogers	1962 (August)

NAME	MAJOR PROFESSOR	YEAR
143. Leonard Carl Douglas	F.E. Rogers	1962 (August)
144. Oliver W. Lutgen	F.E. Rogers	1962 (August)
145. E.B. Nace	F.E. Rogers	1962 (August)
146. Larry A. Hale	Stirling Kyd	1963 (January)
147. Arthur C. Ausherman	Stirling Kyd	1963 (January)
148. Bradley E. Friesz	Stirling Kyd	1963 (January)
149. William W. Hoff	Stirling Kyd	1963 (January)
150. Arun Basu	Stirling Kyd	1963 (January)
151. Henrietta Garrison Clark	Stirling Kyd	1963 (June)
152. James Lee Harrison	Stirling Kyd	1963 (June)
153. Kathryn R. Libbee	Stirling Kyd	1963 (June)
154. Ralph R. Rogers	Stirling Kyd	1963 (June)
155. Joseph H. Vogliardo	Stirling Kyd	1963 (June)
156. Walter T. Wilkening	Stirling Kyd	1963 (June)
157. Tailendranath Borgohain	Randel K. Price	1963 (August)
158. Santosh Kumar De	Randel K. Price	1963 (August)
159. Katuputur N. Duraiswamy	Randel K. Price	1963 (August)
160. Mohammad Hamid	Randel K. Price	1963 (August)
161. Jagannath V. Kalokhe	Randel K. Price	1963 (August)
162. R.D. Kaushik	Randel K. Price	1963 (August)
163. Bikram Mallick	Randel K. Price	1963 (August)

NAME	MAJOR PROFESSOR	YEAR
164. Paul H. Mayginnes	Randel K. Price	1963 (August)
165. Sisir Kumar Mukhopadhyay	Stirling Kyd	1963 (August)
166. Bhabatosh Pal	Randel K. Price	1963 (August)
167. Dherish Kumar Paul	Randel K. Price	1963 (August)
168. Danda Rami Reddy	Randel K. Price	1963 (August)
169. M.K. Sethu Rao	Randel K. Price	1963 (August)
170. Badri Singh	Randel K. Price	1963 (August)
171. Doris M. Terrill	Randel K. Price	1963 (August)
172. Lekh Ram Vaidya	Randel K. Price	1963 (August)
173. A. Venkataraman	Randel K. Price	1963 (August)
174. Elbert Waide	Randel K. Price	1963 (August)
175. Alice Padova (Anderson)	Randel K. Price	1963 (August)
176. Hubert H. Headrick	Randel K. Price	1964 (January)
177. Jay D. Dains	Randel K. Price	1964 (January)
178. Doris Jean Lessen	Randel K. Price	1964 (January)
179. Paul R. Taylor	Stirling Kyd	1964 (January)
180. Kenneth Romang	Randel K. Price	1964 (June)
181. Paul H. Gwin	Stirling Kyd	1964 (June)
182. Joe Barton McVeigh	Randel K. Price	1964 (June)
183. Joseph F. Patke	Randel K. Price	1964 (June)
184. Owen A. Fox	Randel K. Price	1964 (June)

NAME	MAJOR PROFESSOR	YEAR
185. Glenn S. Geiger	Randel K. Price	1964 (June)
186. Robert W. Chappel	Randel K. Price	1964 (June)
187. R. James Hodgson	Stirling Kyd	1964 (June)
188. Gail W. King, Jr.	Randel K. Price	1964 (June)
189. L.C. Hunter	Randel K. Price	1964 (June)
190. William K. Wedekind	Randel K. Price	1964 (June)
191. Gerald W. Kerr	Randel K. Price	1964 (August)
192. R.P. Gupta	Randel K. Price	1964 (August)
193. Charles L. Atkins	Randel K. Price	1964 (August)
194. Gilbert T. Hess	Randel K. Price	1964 (August)
195. Chaman Lal Gupta	Randel K. Price	1964 (August)
196. Ruth J. Reynolds	M.N. Greenwood	1964 (August)
197. V.G. Manomohanan	Randel K. Price	1964 (August)
198. Binoy Krishna Bose	Randel K. Price	1964 (August)
199. Ram Sewak Yadav	Randel K. Price	1964 (August)
200. K.C. Dube	Randel K. Price	1964 (August)
201. Leonard L. Buschmann	Randel K. Price	1964 (August)
202. Jag Bahadur Burathoke	Randel K. Price	1964 (August)
203. S.S. Bhadoria	Randel K. Price	1964 (August)
204. Osama El Sheikh Yassin	Randel K. Price	1965 (January)
205. Frances Meyer	Virginia Norris	1965 (January)

NAME	MAJOR PROFESSOR	YEAR
206. Donald N. Mobley	Randel K. Price	1965 (January)
207. Gaylon Fanning	Randel K. Price	1965 (January)
208. Larry C. Jenkins	Randel K. Price	1965 (January)
209. Berthamae Howard	Virginia Norris	1965 (January)
210. Don G. Ham	Randel K. Price	1965 (January)
211. Ralph G. Brantley	Randel K. Price	1965 (January)
212. Wayne L. Atkins	Randel K. Price	1965 (June)
213. Fred Duane Dailey	Randel K. Price	1965 (June)
214. Ray Oglesby Davis	Randel K. Price	1965 (June)
215. Roy Luther Hager	Randel K. Price	1965 (June)
216. Warren D. Hargus	Randel K. Price	1965 (June)
217. Everett Lane	Randel K. Price	1965 (June)
218. George W. McCollum	Randel K. Price	1965 (June)
219. Maria del Carmen Moutenegro	Virginia Norris	1965 (June)
220. Washington Naranjo Garcia	Randel K. Price	1965 (June)
221. Fred O. Oehring	Randel K. Price	1965 (June)
222. Lawrence E. Olson	Randel K. Price	1965 (June)
223. William O. Rader	Randel K. Price	1965
224. Madan Sundar Sahoo	Randel K. Price	1965 (June)
225. Roger E. Wilcoxson	Randel K. Price	1965 (June)
226. William K. Hendrick	Randel K. Price	1965 (June)

NAME	MAJOR PROFESSOR	YEAR
227. Gilbert L. Rader, Jr.	Randel K. Price	1965 (August)
228. Lloyd C. Lewellen	Randel K. Price	1965 (August)
229. Ranadhir Mitra	Randel K. Price	1965 (August)
230. Guillermo L. Valena	Randel K. Price	1966 (January)
231. Rameshwar B. Singh	Randel K. Price	1966 (January)
232. Kashinath Rout	Randel K. Price	1966 (January)
233. Walter L. Ries	Randel K. Price	1966 (January)
234. Gopeswar Rajaguru	Randel K. Price	1966 (January)
235. Hugh L. Nutt	Randel K. Price	1966 (January)
236. Bhaisarn Anooasanandha	Randel K. Price	1966 (January)
237. Geraldine Renchen	Randel K. Price	1966 (June)
238. Kenneth F. Baker	Randel K. Price	1966 (June)
239. Evelyn Sue Fowler	Randel K. Price	1966 (June)
240. Robert L. Gawf	Randel K. Price	1966 (June)
241. Coraellen O'Neal	Randel K. Price	1966 (June)
242. James L. Whitfield	Randel K. Price	1966 (August)
243. Brundaban Misra	Randel K. Price	1966 (August)
244. Ralph Angel	Randel K. Price	1966 (August)
245. Gerald J. Zumbrunnen	Randel K. Price	1966 (August)
246. Ray E. Kampschmidt	Randel K. Price	1966 (August)
247. Donald Wickizer Bailey	Randel K. Price	1966 (August)



<b>NAME</b>	<b>MAJOR PROFESSOR</b>	<b>YEAR</b>
248. Gilbert Rhodes	Randel K. Price	1966 (August)
249. Charles Edwin Page	Randel K. Price	1966 (August)
250. Dona Atkinson Ingle	Randel K. Price	1967 (January)
251. Claude Emmet Lewis	Randel K. Price	1967 (January)
252. R. Gerald Gabriel, Sr.	Randel K. Price	1967 (January)
253. Loren Dean Thompson	Randel K. Price	1967 (January)
254. Phillip M. Weedin	Randel K. Price	1967 (January)
255. Robert A. Gibson	Randel K. Price	1967 (June)
256. Hartford L. Patrick	Randel K. Price	1967 (June)
257. Thomas B. Stroup	Randel K. Price	1967 (June)
258. Donald W. Mocker	Randel K. Price	1967 (June)
259. Edmund A. Bohl, Jr.	George P. Rowe	1967 (June)
260. Robert L. Heitmeyer	Randel K. Price	1967 (June)
261. Gerald K. Freeze	Randel K. Price	1967 (June)
262. Shirley Jean Snelson	Randel K. Price	1967 (June)
263. Awetajegne Alenayehu	Randel K. Price	1967 (August)
264. Darel L. Baker	Randel K. Price	1967 (August)
265. Jack Barnard	Randel K. Price	1967 (August)
266. Alemu Mengistu	Randel K. Price	1968 (January)
267. William L. Buehler	Randel K. Price	1968 (January)
268. William Ed Greenfield	Randel K. Price	1968 (January)

NAME	MAJOR PROFESSOR	YEAR
269. Frank F. Haston	Randel K. Price	1968 (January)
270. Bibhuti Bhushan Rath	Randel K. Price	1968 (January)
271. Lester O. Akers	George P. Rowe	1968 (June)
272. Frederick W. Clayton	Randel K. Price	1968 (June)
273. Katherine K. Hill	Randel K. Price	1968 (June)
274. John Ellis Martin	Randel K. Price	1968 (June)
275. Thomas Owen Perrin	Randel K. Price	1968 (June)
276. James E. Summers	Randel K. Price	1968 (June)
277. D. Kanakaraj	Randel K. Price	1968 (July)
278. Alvis Dexter Arnhart	Randel K. Price	1968 (August)
279. Stanley L. Detring	Randel K. Price	1968 (August)
280. Wilbert W. Thomas	Randel K. Price	1968 (August)
281. Wesley Earl Whiteside	George P. Rowe	1968 (August)
282. James Otis Freeman	George P. Rowe	1969 (January)
283. C. W. Browning	Randel K. Price	1969 (June)
284. Derwood Guy Burns	Randel K. Price	1969 (June)
285. William H. Brown	John G. Gross	1969 (August)
286. John Andrew Croll	Randel K. Price	1969 (August)
287. Baz M. Faizi	John G. Gross	1970 (January)
288. Harold S. Smith	George P. Rowe	1970 (June)
289. Wendell Roberts	John G. Gross	1970 (June)

NAME	MAJOR PROFESSOR	YEAR
290. Cyril Roark Rickett	George P. Rowe	1970 (June)
291. Donald Lee Henderson	John G. Gross	1970 (June)
292. J. Daniel Hill	Randel K. Price	1970 (June)
293. Pi-Feng Hong	Randel K. Price	1970 (June)
294. Moses Alvarez Quintero	Randel K. Price	1970 (June)
295. Jeanne N. O. Deanne	John G. Gross	1971 (February)
296. James C. Long	John G. Gross	1971 (February)
297. Freddie Gale Mailes	John G. Gross	1971 (February)
298. James Robert Teegarden	John G. Gross	1971 (February)
299. Gregory Amantu	John G. Gross	1971 (June)
300. Gabriel Ojeda	Randel K. Price	1971 (June)
301. James T. Bray	John G. Gross	1971 (August)
302. James Luther Wirz	John G. Gross	1971 (August)
303. Glenn Patton	John G. Gross	1971 (December)
304. Richard S. Bostdorff	John G. Gross	1972 (May)
305. Roger W. Lord	John G. Gross	1972 (May)
306. Damana Jamari Gaya	John G. Gross	1972 (May)
307. Jack D. Huff	George P. Rowe	1972 (May)
308. Donald Charles Zick	John G. Gross	1972 (August)
309. Mary Gladys Marshall	Rowe/Gross	1972 (December)
310. Robert Donald Thacker	John G. Gross	1972 (December)

<b>NAME</b>	<b>MAJOR PROFESSOR</b>	<b>YEAR</b>
311. Byron D. Morrison, Jr.	Rowe/Lineberry	1972 (December)
312. Pamorn Saraitong	Lineberry/Gross	1973 (May)
313. Thongsueb Phewthongin	Lineberry/Gross	1973 (May)
314. Willis Merle Townsend	John G. Gross	1973 (May)
315. Teshome Woldesemayat	John G. Gross	1973 (December)
316. James Ray Parsley, Jr.	John G. Gross	1973 (December)
317. Nora Salleh Bahrudin	John G. Gross	1974 (May)
318. James W. Hollis	John G. Gross	1974 (May)
319. Clarence J. Robinson	John G. Gross	1974 (May)
320. Sabas Ramiro Tafur-Reyes	John G. Gross	1974 (May)
321. Vilas Earl Young	John G. Gross	1974 (May)
322. Sant Cotchaisathit	John G. Gross	1974 (August)
323. Ly-Thanh-Tuu	John G. Gross	1974 (December)
324. Abneri H. Senyagwa	John G. Gross	1975 (May)
325. Michael C. Wagner	John G. Gross	1975 (August)
326. Charoenvong Arun	John G. Gross	1975 (December)
327. Donald Ray Barnett	John G. Gross	1975 (December)
328. Suriyo Somsak	John G. Gross	1975 (December)
329. Sojaiya Suttinee	Eileen Lineberry	1975 (December)
330. Richard Mkandawire	John G. Gross	1977 (May)
331. Sherrie Zarr	John G. Gross	1978 (May)

NAME	MAJOR PROFESSOR	YEAR
332. Weera Thaipanich	John G. Gross	1978 (August)
333. Joan E. Marsh	John Mowrer	1978 (December)
334. Martin G. MacDonald	John G. Gross	1978 (December)
335. Mary Alice Alspaugh	John G. Gross	1978 (December)
336. Alice M. Crites	John G. Gross	1979 (May)
337. John Garaventa	John G. Gross	1979 (May)
338. Pius Paul Mbwala	John G. Gross	1979 (December)
339. Cathy Ann Dierking	John G. Gross	1979 (December)
340. Janet Sue Murray	John G. Gross	1980 (May)
341. Zebedayo S.K. Mvena	John G. Gross	1980 (May)
342. Malikhan Singh Chauhan	John G. Gross	1980 (May)
343. Jean Marie Kuster	John G. Gross	1980 (August)
344. Otto Dumbach	John G. Gross	1980 (December)
345. Warren J. Thomas	John G. Gross	1981 (June)
346. Richard Ruddle	John G. Gross	1981 (June)
347. Fatma Misurati	John G. Gross	1981 (December)
348. Beth France	John G. Gross	1981 (May)
349. Richard Brozozowski	John G. Gross	1981 (May)
350. Nelson Samosir	John G. Gross	1981 (August)
351. Joseph Akanbi	John G. Gross	1981 (August)
352. Shelle Trader	John G. Gross	1981 (August)

<b>NAME</b>	<b>MAJOR PROFESSOR</b>	<b>YEAR</b>
353. David Hileman	John G. Gross	1981 (December)
354. Eunice Akanbi	John G. Gross	1982 (May)
355. Maniamba B. Maniamba	John G. Gross	1982 (May)
356. Frank Manzi	John G. Gross	1982 (May)
357. Rhonda Kay Kesler	John G. Gross	1982 (August)
358. Mohd Hussin Yunus	John G. Gross	1982 (August)
359. Hugo Kisoli	John G. Gross	1982 (December)
360. Mukri Siregar	John G. Gross	1982 (December)
361. Barbara K. Brown	John G. Gross	1983 (May)
362. Leroy Sharp, Jr.	John G. Gross	1983 (May)
363. Rhoda Williams	John G. Gross	1983 (May)
364. Michael Mziray	John G. Gross	1983 (August)
365. Morgan Matsiga	John G. Gross	1983 (August)
366. Gopal P. Upadhyaya	John G. Gross	1983 (December)
367. Samuel O. Sassi	John G. Gross	1983 (December)
368. Philips Waribagha	John G. Gross	1983 (December)
369. Rahim Uddin Ahmed	John G. Gross	1984 (May)
370. Yousuf Al-Tarakma	John G. Gross	1984 (May)
371. B.M.M. Elias Hossain	John G. Gross	1984 (May)
372. Richard D. Linhardt	John L. Mowrer	1984 (May)
373. Dhrub Manandhar	John G. Gross	1984 (May)

NAME	MAJOR PROFESSOR	YEAR
374. David J. Moen	John G. Gross	1984 (July)
375. Chandruok P.A. Nyangala	John G. Gross	1984 (August)
376. Christie Fri-Ngundam	John G. Gross	1984 (August)
377. Maseabata Ntoanyane	John G. Gross	1984 (August)
378. Marjorie M. Slayton	John G. Gross	1984 (December)
379. James David Russell	John L. Mowrer	1985 (May)
380. Beyra E. Jaen	John L. Mowrer	1985 (May)
381. Rasnayake Karunaratne	John L. Mowrer	1985 (August)
382. Callistus Joseph Kharapuwa	John L. Mowrer	1985 (August)
383. Mohammed Aissi	John L. Mowrer	1985 (December)
384. Gulsen Izzeddin Ibrahim	John G. Gross	1985 (December)
385. Ricardo Jose Restrepo	John L. Mowrer	1985 (December)
386. Jit Bahadur Gurung	John L. Mowrer	1986 (May)
387. James A. Okeyo	John L. Mowrer	1986 (May)
388. Peter A. Mbianyor	Greg Nolting	1986 (December)
389. Emmanuel A. Oyeola	Greg Nolting	1986 (December)
390. Satish Jaiswal	Greg Nolting	1987 (May)
391. Bela Manik	Greg Nolting	1987 (May)
392. Mary Mgema	Greg Nolting	1987 (December)
393. Prawat Wettayaprasit	Greg Nolting	1988 (May)
394. Robert R. Broz	Greg Nolting	1988 (August)

<b>NAME</b>	<b>MAJOR PROFESSOR</b>	<b>YEAR</b>
395. Tabitha Modzura Chandiwana	Richard McCallum Greg Nolting	1988 (August)
396. Mehmet Demirtas	Greg Nolting	1988 (August)
397. Jackie L. Coon	Greg Nolting	1988 (December)
398. Kimberly Kay Bailey	Greg Nolting	1989 (May)
399. George T. Allton	Greg Nolting	1989 (August)
400. Napoleon Aponte B.	Greg Nolting	1989 (December)
401. Cesar Roberto Asuaje Romero	Greg Nolting	1989 (December)
402. Eduardo Jose Delgado	Greg Nolting	1989 (December)
403. Carlos Miguel Mendoza	Greg Nolting	1989 (December)
404. Magda Prozo	Greg Nolting	1989 (December)