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## NDSU '61 Festival To Be April 21-23; Everyone Is Invited

Thousands of visitors are expected on campus for North Dakota State University's third annual Sharivar festival, April 21-23.

Everyone in North Dakota has been invited; high school students, their parents, alumni and friends of the institution.

This year's big open house and celebration will be particularly significant, according to President Fred Hultz, because the entire campus community is pleased at the vote of confidence North Dakotans gave when they endorsed the NDSU name change at the polls last fall. Everyone wants the visitors' stay to be pleasant and rewarding.

**Bruce Anderson and Ona Carlson, co-chairmen of the event, state, "Special efforts are being made to put every part of the university on display."**

A huge program of events has been scheduled, a portion of which is shown on the program on the following page. But there will be so much to see and do, and so many things will take place at about the same time that it will be difficult for any visitor to see everything.

"That's why visitors return year after year to the Sharivar festival," the student chairmen point out. "There is always something different to see and do."

For example, all the buildings on campus will be open to inspection, with students and faculty members around to tell you what is going on. Some buildings have been changed around since last year. Most of the exhibits will be different from last year. The

pharmacy building, Sudro Hall is totally new.

**If you are an old alumni, you may want to wander around by yourself to see exactly how things have changed. Or you can join a guided tour and have student leaders show you around.**

For entertainment, there will be dancing, a bowling tournament, open houses in the housing facilities and a host of impromptu activities.

Perhaps the biggest entertainment treat will be the campus presentation of "South Pacific," Rodger's & Hammerstein's great musical based on the Mischener stories of the war-time Pacific.

Rehearsals for the show have been under way for weeks. It is "on" every night of Sharivar.

High School seniors will find that numerous programs have been arranged especially to help them plan a college career. A special information program on costs, housing and registration procedures will be held April 22 at 10 a.m. Both parents and high school seniors will have opportunity to discuss with faculty members the various areas of study the university provides.

**Cash scholarships will be awarded to some high school senior visitors to Sharivar. Interviews for these grants will also be conducted April 22.**

There will also be prizes for high school and high school seniors based on such things as "the school with the biggest percentage of its seniors present."



### Here Is Story Of This Paper

This special Sharivar edition of the Spectrum is a tradition older than Sharivar.

### Churches Maintain On Campus Centers

Campus religious centers will be among the most attractive exhibits during Sharivar. Church groups on campus which will have open house during the three-day festival include: YMCA, YWCA; Lutheran Student Association, Newman Foundation (Catholic), Wesley Foundation (Methodist), Baptist Student Union, Canterbury Club (Episcopal), United Campus Christian Fellowship, Congregational, Evangelical and Reformed, Evangelical and United Brethren (Presbyterian), Interviarity Christian Fellowship and Gamma Delta (Missouri Synod). Many of these groups have resident pastors. The Fargo School of Religious Education also is on campus, and coordinates classes with the university. NDSU students, of course, are always welcome to attend and take part in activities in all of Fargo's many churches.

For many years, NDSU students have mailed a specially-written and made up newspaper to every North Dakota high school senior.

This is done both to encourage students to continue their education and to invite them to come and inspect the campus.

The editorial staff of the publication is made up mostly of students in advanced communications classes. But every student on campus contributed in one way or another.

Editor in Chief is Evanne Grommesh, retiring Spectrum editor. Managing Editor is Myrna Erickson with Frank Vyzralek as Business Manager. Page Editors were Gary Longballa, Cecile Myra, Loren Stadig, Alyce Puppe and Ronald Ginsbach. Verne Nies, assistant professor of communications, is advisor.

Photos came from Spectrum and Bison Yearbook files or were taken especially for the publication by Mr. Nies.

The staff of this edition wishes to join with the University President, the Student Body President and the Sharivar Committee to urge you to come to Sharivar.



# Greetings to Seniors . . .

# SHARIVAR SCHEDULE

Your education will become part of your net worth. It can be capitalized like real property—valuable to your state and nation. It is worth money to you. But most important, your education will open up broad vistas to you for those accomplishments which give true satisfaction in a life of good living.



**William L. Guy**  
Governor

The period in which we live may well be called "The Age of Education" for the Twentieth Century has seen tremendous expansion of education and an increasing concern about it.

Consequently, today, more than ever before, it is necessary that a young person have training beyond the high school. It is necessary not only from the standpoint of broadened ability and intellect, but also in meeting competition. This competition is not limited to the individual's means of earning a livelihood, but applies also to social and civic endeavor. With standards constantly moving upward, it is imperative that high school students plan seriously for the years ahead. Many persons who seek employment upon graduation from high school rather than continue their education in a recognized institution of higher learning have already found the going rough. They are beginning to realize that the school of experience does not pay off as well as it once did and that the opportunities are alarmingly limited.



Of course, the benefits of a college or university education are not limited to the individual. Through an informed, specialized, and clear-thinking citizenry, the community, the nation, and the world gains through improved productivity, higher standards, better cooperation, and greater understanding. Since advanced preparation helps students meet higher standards and provides greater assurance of their future success, they should not be content with an education which merely meets the educational needs of today. Instead, their concern should be to prepare for the needs of their lifetime. Therefore, these young people should begin planning now for further training and thus assure more security, happiness, and understanding to themselves and to the society in which they live.

**A. E. Mead**  
Commissioner of Higher Education

It is a sincere pleasure to invite you to participate in the 1961 Sharivar.

We at NDSU are very proud of our students and the success they have made of this all-university festival. The 1961 Sharivar marks the third anniversary of the event, and with the fine groundwork developed by the present Sharivar committee and the two which preceded it, we can expect many Sharivars to follow.

The purposes of the festival are several, but basically, they include:

- An opportunity for the citizens of North Dakota and the surrounding area to see the several colleges and divisions of the State University in action, portrayed by exhibits and shows with a wide interest for all.
- Fun and frolic for the high school generation which includes bands, sports, theater, and dancing, with liberal prizes and scholarships.
- A fostering of the festival tradition as being a typical characteristic of the friendly response of people in this great upper midwest. We hope to have the pleasure of seeing you on April 21, 22 or 23.



**Fred S. Hultz**  
President  
North Dakota State University

Within a few months many of you will have to make one of the most important decisions of your lifetime; whether you should attend college and, if so, where? We at North Dakota State University would like the opportunity to help you make the right decision. We hope to do this through Sharivar, 1961.



Through Sharivar we try to give high school seniors a glimpse at college life as well as our own university of which we are proud. Departmental displays which feature the particular emphasis of that department as well as the many other exhibits by campus organizations all combine to give you an idea of what college life is like.

Aside from the scholastic aspects of college life we have planned an entertaining recreational program while you are here including such things as bowling, dances, open houses at fraternities and sororities, and many, many other things. One of the outstanding features of Sharivar weekend will be "South Pacific", an all-student produced Broadway musical, which will be playing three nights for your enjoyment.

The students at North Dakota State have worked hard to give you this tremendous opportunity to see college life. We hope you take advantage of it.

**WAYNE HAMANN**  
Student Body President

## FRIDAY, APRIL 21

- 1:00-11:00 P.M.
- 1:00-5:00 P.M.
- 2:00 P.M.
- 3:30-5:00 P.M.
- 8:15 P.M.
- 9:00-12:00 P.M.

- Bowling in Union lanes for high schools
- Open house in all colleges on campus
- Style Show in assembly room of Home Ec building
- Coffee hour for high school girls in Home Ec building
- "South Pacific" in field house
- Dance in Memorial Union Ballroom

## SATURDAY, APRIL 22

- 10:00 A.M.
- 11:00-5:00 P.M.
- 11:00-5:00 P.M.
- 12:30 P.M.
- 1:30-3:00 P.M.
- 2:00 P.M.
- 2:00-4:00 P.M.
- 2:00-5:00 P.M.
- 3:00-4:00 P.M.
- 4:00-5:00 P.M.
- 8:15 P.M.
- 9:00-12:00 P.M.

- College Information program in Festival Hall
- Open house in all colleges on campus
- High school bowling in Union lanes
- Scholarship interviews in Library
- Grain Products Tour
- Style Show in assembly room of Home Ec building
- Closed circuit TV in Minard Hall
- Open house in religious centers, dorms and fraternities
- Open house at Kappa Alpha Theta, Kappa Kappa Gamma and Alpha Gamma Delta sororities
- Open house at Kappa Delta, Gamma Phi Beta and Phi Mu sororities
- "South Pacific" in Field House
- Dance in Memorial Union Ballroom

## SUNDAY, APRIL 23

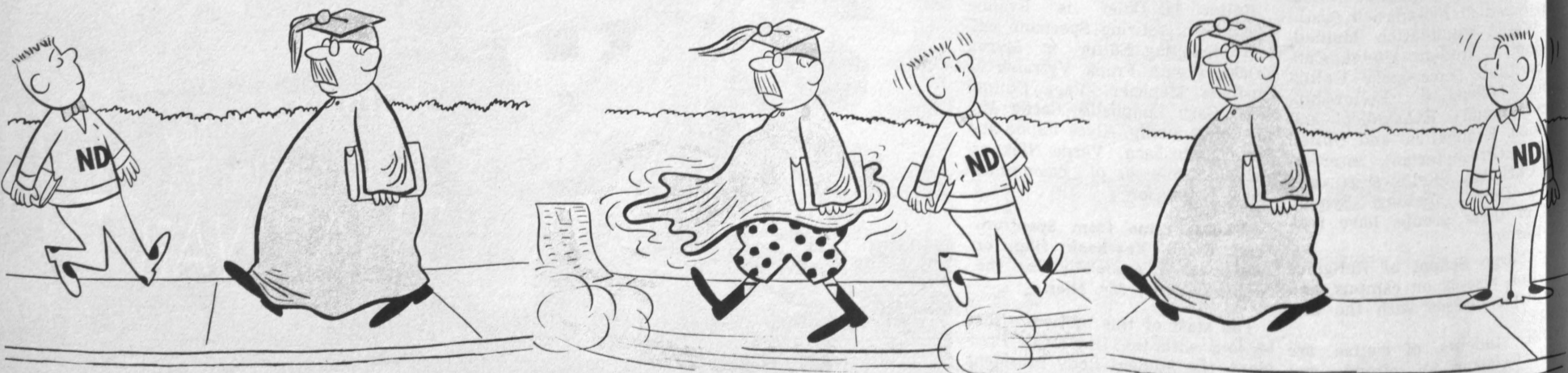
- 11:00 A.M.
- 2:00-4:00 P.M.
- 2:00-5:00 P.M.
- 2:00-6:00 P.M.

- Religious services in campus centers
- Closed circuit TV in Minard Hall
- Fraternity and dormitory open house
- Open house in all colleges on campus

# Sharivar Committee



Paul Brackelsberg, publicity; Ona Carlson, co-chairman; Bruce Anderson, co-chairman; Judi Willert, publicity; **SECOND ROW:** Richard Clemenson, agriculture; Donovan Eck, agriculture; Peter Otte, pharmacy; Howard Blackstead, activities; Kenneth Johnson, chemistry; **THIRD ROW:** Don Schwartz, advisor; Dave Foley, arts and sciences; Walter Nelson, treasurer; William Bakken, engineering and Kurt Newman, engineering. Not shown on the photo are Marx Olson, pharmacy; Carole Schultz and Toni Woodmansee, home economics; Collette Buhr, secretary; and Kathleen Enget, chemistry.



Aspen Green  
THE SUNDAY EVENING POST



*High School Graduates!*

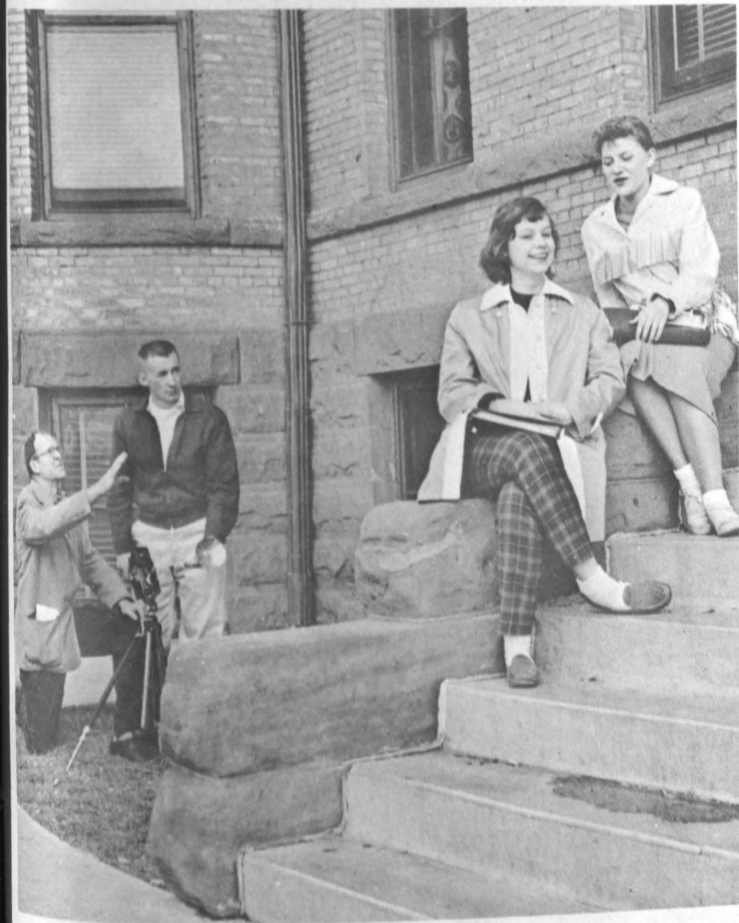
# Meet Challenge of Space Age With Good University Training



**MINARD HALL**, home of NDSU's College of Arts and Sciences, was built in 1901 and has been twice expanded.

**LABORATORY SESSIONS** give students a chance to see and test information they read about in books.

## Arts and Science Offers Both Broad Learning and Careers



The world today's high school senior will inherit will make tremendous demands on its citizens in the matter of understanding what is going on and meeting the challenges of our rapidly-changing society.

The NDSU College of Arts and Sciences can give you both the broad general understanding you need to fit tomorrow's world, and the strong professional training you will have to have to earn a satisfying living.

Headquartered in historic, old Minard Hall, the courses taught in arts and science overflow into half a dozen other buildings on campus.

Considerable remodeling has been done recently so that students in Minard Hall can enjoy the best possible facilities.

All the laboratories have been enlarged and modernized to meet the influx of new students. Classrooms have been changed around and new seating has been in-

stalled to increase seating capacity and aid students in getting their instructor's messages.

Every new student on campus soon becomes familiar with Minard Hall, because so many of the courses required by all colleges are taught there.

**A freshman must take English, mathematics, zoology and botany, all taught in Minard Hall.**

As upperclassmen you will find yourself returning again and again to arts and science classrooms. You will go there to get your speech, your sociology, your history, your political science, your philosophy, your foreign languages and for education and psychology courses.

A great many students also take part in activities sponsored by the College of Arts and Sciences. Most departments have clubs and special interest groups, like the Spectrum newspaper, the Bison yearbook advised by the

Communications Department and Radio advised by persons in Communications and Speech.

**The Music Department's Gold Star Band, Concert Choir and College Chorus provide students opportunity for musical expression and travel on concert tours.**

The plays, debate and speech therapy work of the Speech Department are well known throughout the midwest. Little Country Theater is world famous and activities of NDSU dramatics students in North Dakota outdoor drama have added a colorful page to North Dakota's book of tourist attractions.

The Physical Education Departments conduct a broad range of programs designed to improve the physical well-being of the NDSU student and to provide entertainment and relaxation. Students can take part in competitive varsity Football, Basketball, Track and Wrestling and many additional intramural sports.

**PICTURES TELL stories better than words, communications students learn in practical sessions.**

## Graduate Students Get Special Help

One of the results of our nation's tremendous cultural and technological growth has been the increased need for persons who have training beyond the conventional four and five-year college degrees. Much of this training must come from graduate schools such as the one at NDSU. More than 300 students are en-

rolled in NDSU Graduate School, according to Dean Glenn Smith.

**Of these, 14 are working on their Ph.D programs, the highest university degree attainable.**

Master's degrees are offered in more than 40 departments in all the six colleges. Last year 81 students qualified for this degree. This year, Dean Smith says, there will be at least as many.

Financial help is available for outstanding students who seek graduate degrees at NDSU. This comes in the form of fellowships, scholarships and assistantships financed by the federal and state governments and private organizations.

National Science Foundation and National Defense Foundation grants, financed by congress, give aid as high as \$2,200 a year per student.

**Seven Ph.D candidates are earning degrees in plant science at NDSU with help from these grants. Two more have been awarded for next September.**

Teaching and research fellowships offered in graduate school pay from \$1,600 to \$2,400 a year. Students enrolled under these work about half time, and carry a reduced load of studies.

Students working on their graduate thesis in research projects spend many hours in laboratory work.

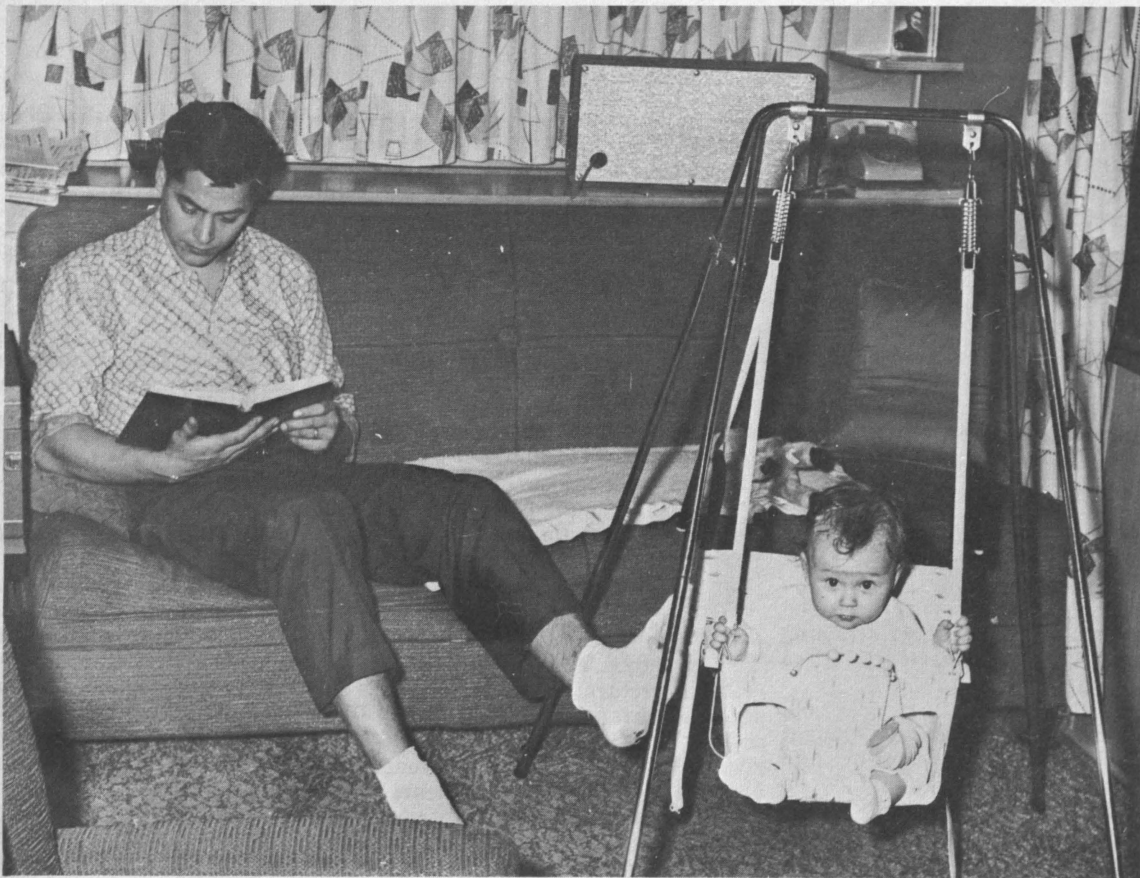
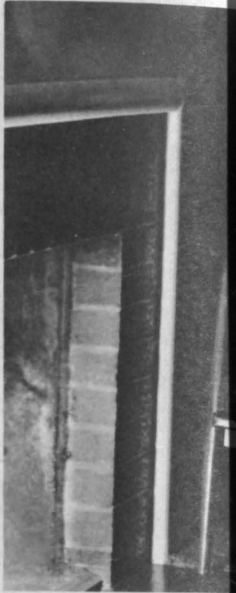
**GRADUATE ASSISTANTS perform valuable services at NDSU by helping students in laboratory.**



# LIFE at NDSU Challenges You

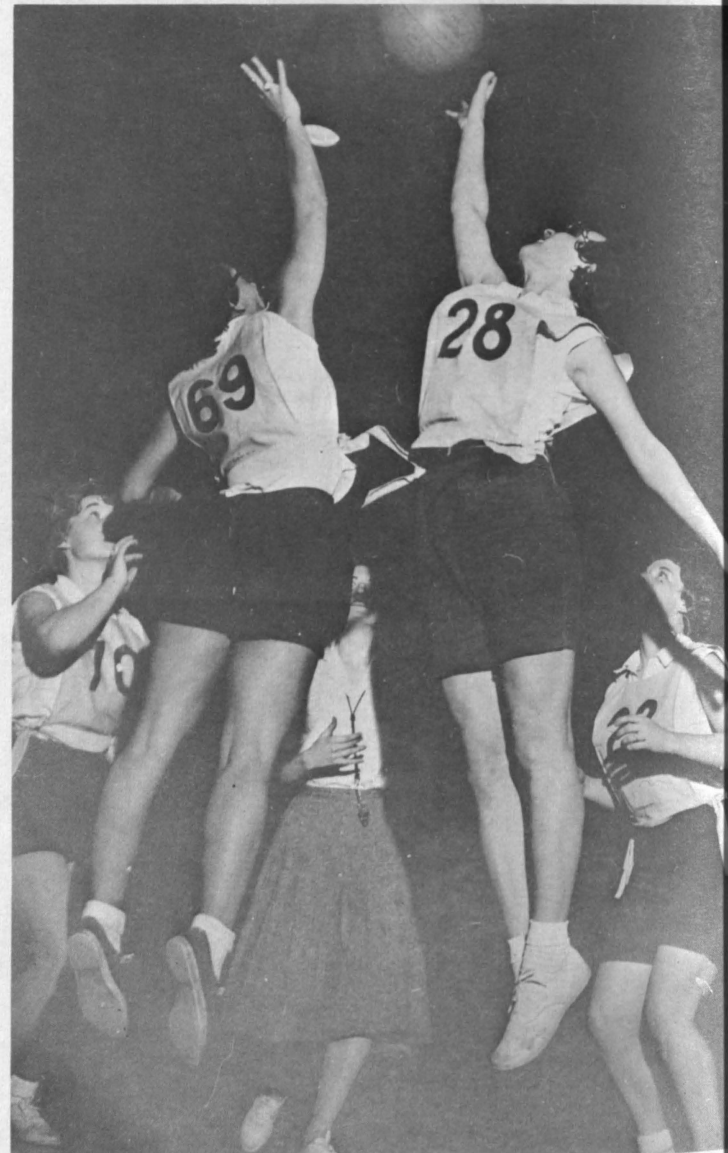


**LONG UNCERTAIN LINE** of freshman students awaiting registration instruction. Probably the only other time students will get in a line this long is graduation.



**STUDY** takes a large part of each student's time. This is true whether he be married, as 20% of NDSU students are, or single.

**CO-ED QUARREL!** Well, not exactly. They are portraying a scene in a Little Country Theater production.



**A HIT** with students is spring picnic time.



# from Freshman Registration to Graduation



**SPIRITUAL GUIDANCE** is provided at several student religious centers on campus, each with a resident pastor.

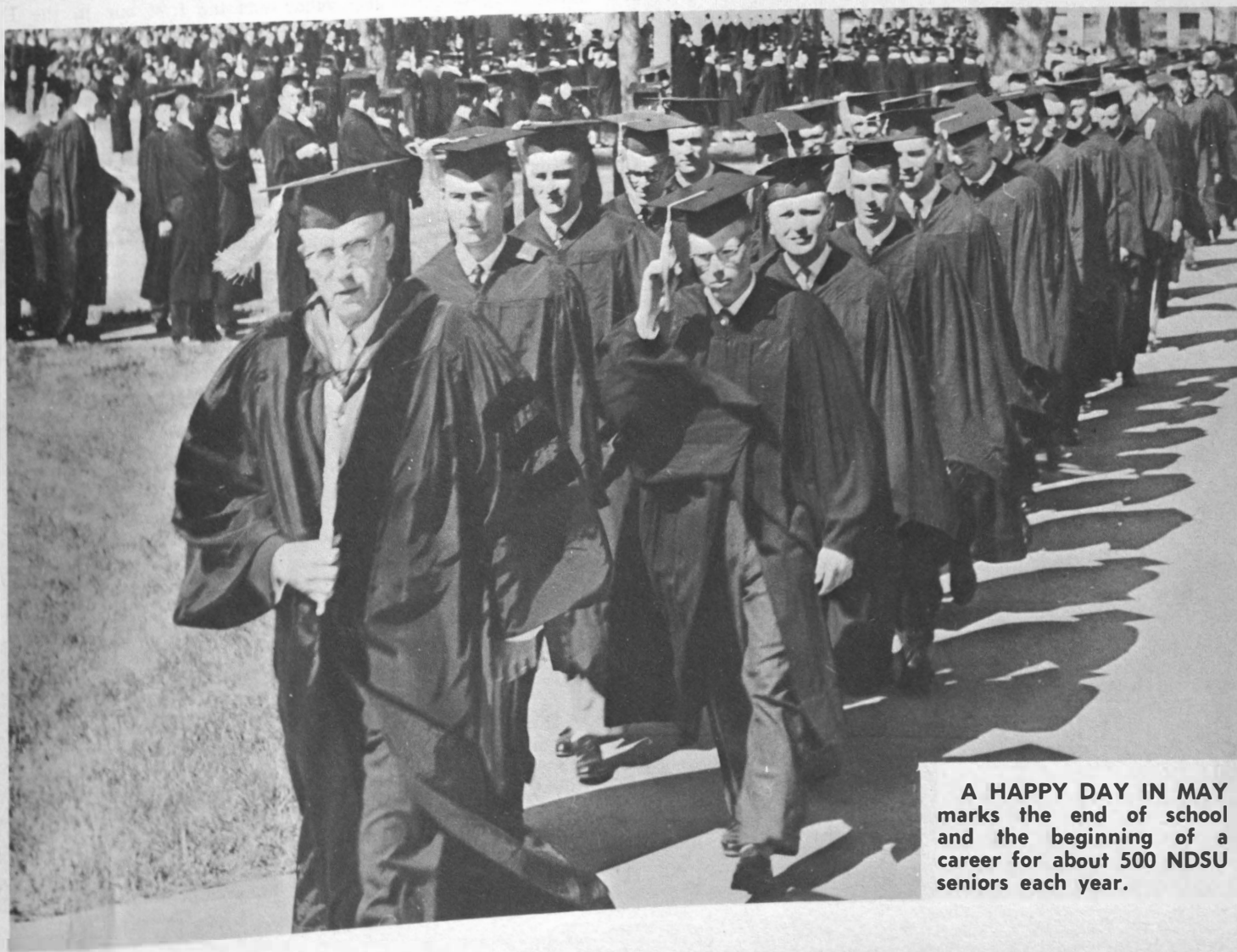
**MARCH WITH NDSU** band if you have a yen for music. Whatever your musical inclination there's a place for you in campus music groups.



**A GOOD DEAL** for snow-bound students are the facilities of the student union where dozens "waited out" last November's blizzard.

**UP IN THE AIR** after a basketball, are these women's physical education class members.

**BULLS-EYE** is the aim of this member of the women's rifle team sponsored by the campus ROTC.



**A HAPPY DAY IN MAY** marks the end of school and the beginning of a career for about 500 NDSU seniors each year.

# New \$700,000 Building to Give NDSU Chemistry Top Facilities

A new \$700,000 building will soon replace Ladd Hall as the headquarters for the NDSU College of Chemical Technology and provide superior laboratories, research rooms, classrooms and library for the several branches of chemistry.

Growth of the chemistry college reflects the great importance of that study, and is not surprising in view of the fact that chemistry is involved with just about every aspect of your lives.

The food you eat, the clothing you wear, the fuel and fertilizer farmers use, and even the paper this edition is printed on involve a lot of chemicals. The study of chemistry has unlimited horizons.

A student studying chemistry at NDSU may, with the proper selection of courses, become a teacher of chemistry in high school or college, an industrial or governmental chemist or a

graduate student in advanced chemistry.

Emphasis at NDSU is in six specialized areas. You may study agricultural bio-chemistry, analytical chemistry, inorganic chemistry, organic chemistry, coating technology or physical chemistry. The college offers graduate work and the Ph.D degree can be secured in organic chemistry, bio-chemistry and protective coatings.

The NDSU College of Chemical Technology is accredited by the American Chemical Society and ranks with the top two per cent of the colleges in the United States in the number of accredited chemists it graduates.

A number of scholarships and fellowships are available for students who enroll in chemistry. They range in value from \$100 to \$2,400.

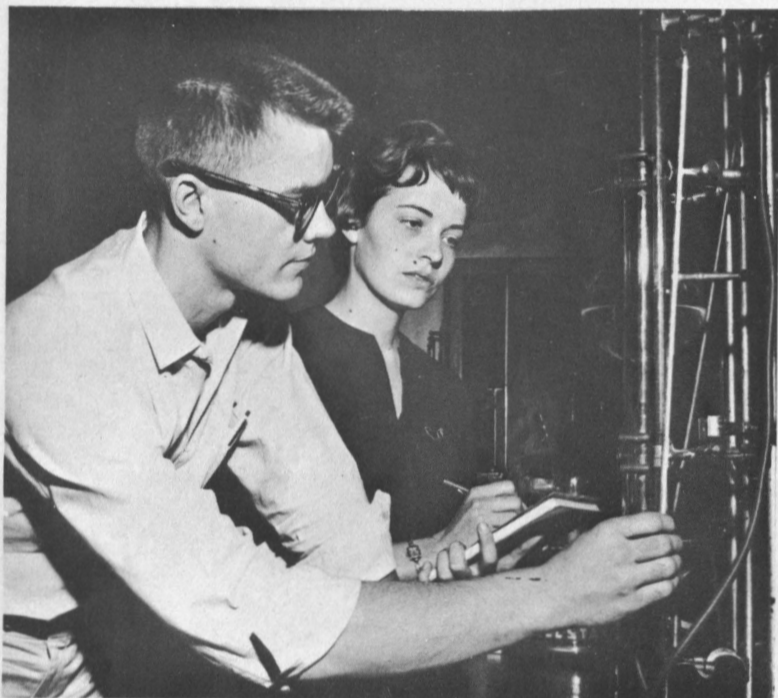
Dr. Frank L. Minnear, dean of chemistry, advises high school students to get as much mathematics,

science and English as they can before coming to NDSU to study chemistry. Sound knowledge in these fields plus a strong desire to succeed in chemistry are the best insurance of success.

**Need for good backgrounds is illustrated by the high grade average of the 116 students enrolled in the College of Chemical Technology.**

Chemistry students develop their professional and social relationships through membership in the Chemistry Club. This organization offers annual scholarships, selects members to the American Chemical Society, maintains a fund for short time loans to chemistry students and performs other services.

This year they gave a hand painted portrait of the late dean of Chemistry, Dr. R. E. Dunbar. The picture is hung in Ladd Hall.



**WEDDING GOWN** is a class project in home economics clothing class.

**EXPERIMENTING** and recording and analysing results take up much of chemistry students' time.



## NDSU Home Economists Challenge Students to Exciting Careers

North Dakota State University became the fifth institution of higher learning in the United States to promote home economics when it held its first class in 1891.

The College of Home Economics has pioneered in a lot of areas, and today is working hard to tell everyone about the tremendous possibilities for young women who have home economics degrees.

**"Whichever future you choose, homemaking or a career, home economics can give you the best possible training," home economists explain.**

Even with growing enrollment, universities cannot supply the need for professional home economists whose salaries can range all the way from \$5,000 to \$15,000.

Job opportunities in home econ-

omics include work in extension, dietetics, teaching, retailing, institutional management, demonstration work, interior decorating, research and the fields of radio, television, newspapers and public relations.

Women in some of the courses at NDSU spend six weeks in the home management house, which was the first one in the United States when it was built in 1923.

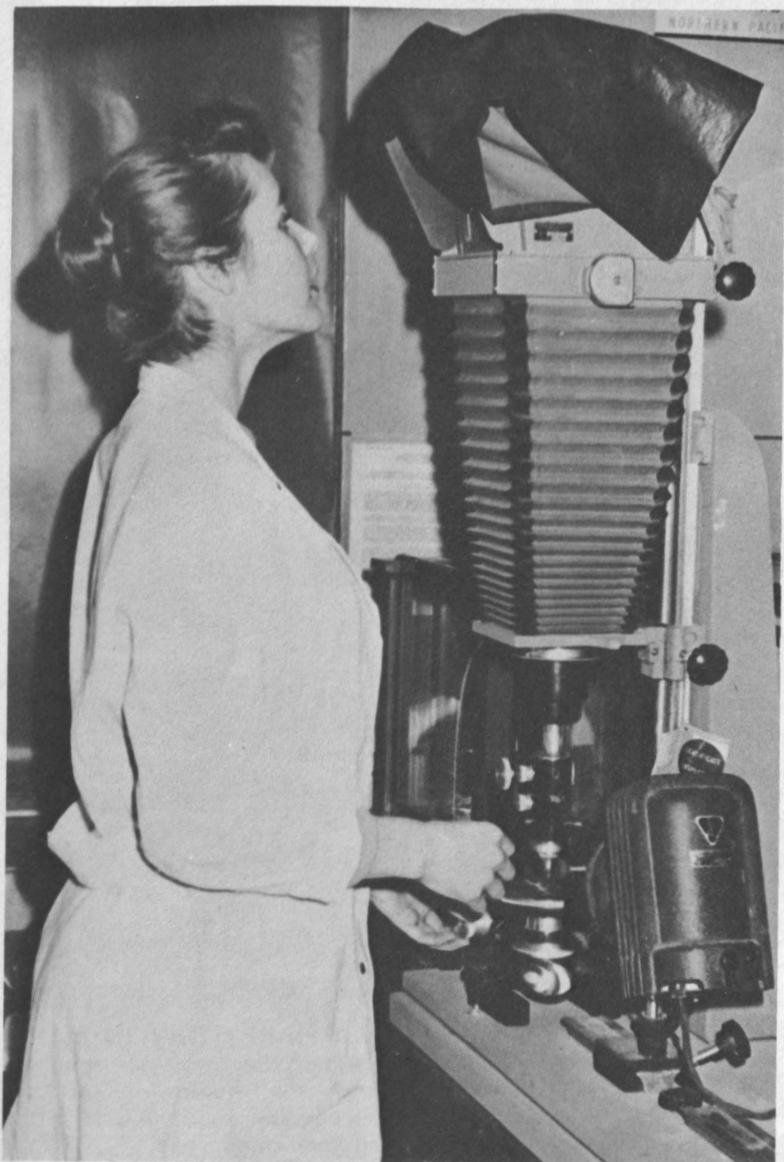
The university also established the first Off Campus Teachers Training Center at Casselton, N. D., in 1929.

The fine, modern building which houses home economics classes, was built in 1954. It demonstrates harmonious arrangement of materials, design, colors, fabrics, equipment and furnishings. So it is an effective setting for teaching the ideals and values of good home and family living.

Each year many home economics students have the chance to take professional trips to Minneapolis and Chicago to visit manufacturing firms, stores, and museums, and to gain career information.

Home economics students likewise have opportunity to join Tryota, the national home economics organization on campus, or Phi Upsilon Omicron, the national honorary and professional home economics fraternity.

"Home Economics at NDSU grew out of the concern for the welfare of families," states Dr. Caroline Budewig, dean of home economics. "It includes not only the skills and techniques of managing a home but the social, psychic and artistic values of family living, as well. Never in history has education for this vital area been more important."



**PHOTOMICROSCOPY** is one of a chemist's ways of telling what a substance is.

**DEMONSTRATING** foods in a well equipped home economics laboratory gives students practical experience.



# New Building and 5-Year Program Give College of Pharmacy Healthy Future

Wherever you go on NDSU campus you will see white-coated young men and women.

It doesn't take you long to find out who most of them of are. Pharmacy students talk a language all their own.

The College of Pharmacy at NDSU is one of the leading training grounds for pharmacists in the nation and it is one of the largest in the midwest.

In addition, the college is moving ahead on a new five-year program designed both to give students the best of education and to provide North Dakota with competent, progressive pharmacists.

A brand new \$660,000 building, Sudro Hall, still being completed in some rooms, provides the college with its first home designed especially for pharmacy training.

Its class rooms are light and airy and its laboratories spacious and well-equipped. In addition,

the new building has facilities for study with radioactive isotopes, a green house for studying medicinal plants and many other conveniences lacked by the former headquarters, Francis Hall, shortly to be torn down.

Students and faculty are proud of their new building and happy that the College of Pharmacy now has a permanent home. From the time pharmacy training started on the campus in 1902, as a two-year course, training had to be conducted in makeshift quarters. Even after Francis Hall became "home" in 1931, the college was handicapped by the fact the building had been designed for other purposes.

Students at NDSU can specialize in any of a dozen different areas of pharmacy, all of which have numerous career possibilities.

Some of the course areas include Pharmaceutical Chemistry,

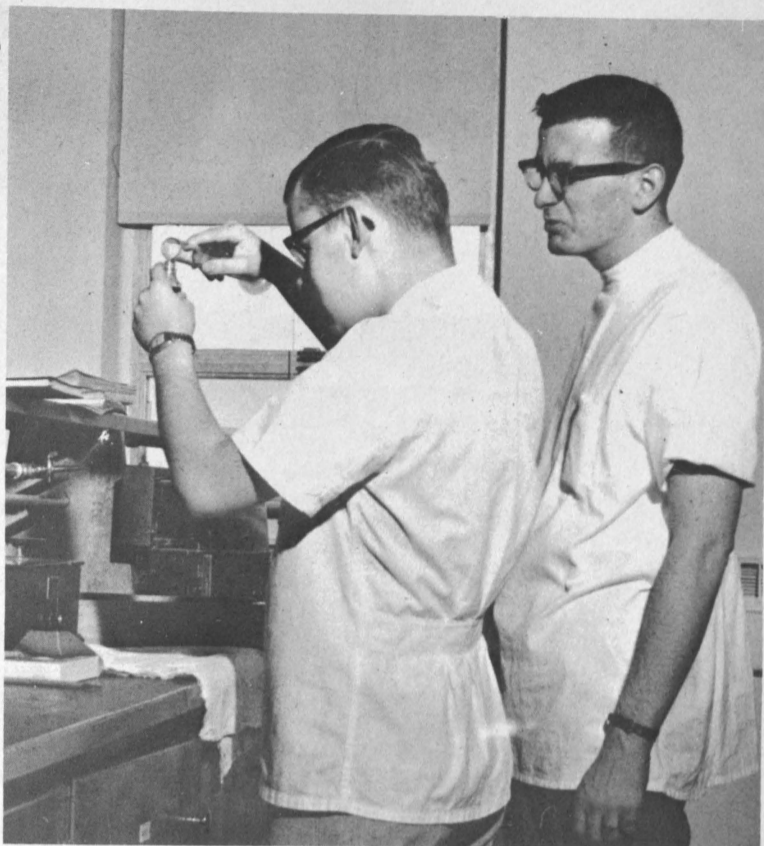
Pharmacognosy, Pharmacology, Pharmacy, Radio Isotopes, Hospital Pharmacy and Pharmacy Administration.

A master of science degree is offered through the NDSU Graduate School in most areas, and a Ph. D. degree can be obtained in Pharmaceutical Chemistry.

The College is accredited by the American Council of Pharmaceutical Education and is a member of the American Association of Colleges of Pharmacy.

Enrollment in the College of Pharmacy this school year has been approximately 300.

**LABORATORIES** are another home to pharmacy students. They spend a lot of time in these modern facilities in their new building.



## Sky No Limit to Careers Open to NDSU Engineers

The engineering profession has undergone a tremendous boom ever since World War II.

That demand for people with engineering skills continues unabated.

One of the reasons is that a good many of the scientists now taking speculative looks at space are engineers. Another is that the problems of building and guiding the huge new machines which are now pioneering space exploration are those that engineers have to solve.

The excitement of the field and the career opportunities certainly contribute a lot to the fact that the NDSU College of Engineering has the largest enrollment of any of NDSU's colleges.

Another inducement to student enrollment in the College of Engineering has been the high-quality training and the variety of courses offered at NDSU.

You can specialize in Architecture, Agricultural Engineering, Architectural Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, Industrial Engineering, and Physics. You can also do graduate work leading to a master of science degree in most fields.

The College of Engineering through its Engineering Experiment Station undertakes a

great many research projects for private and governmental groups.

Through its Extension Service, it provides educational services to North Dakotans generally by short courses, conferences and workshops and publications.

High School students interested in engineering should have as much mathematics and science as they can get. One of the best insurances of success in the rigorous engineering course is to have as sound a high school background as can be managed.

Engineering students have opportunity to take part in a lot of professional groups. Student branch societies exist on campus for eight national engineering organizations. In addition, there are such groups as Radio Club, Sigma Phi Delta, national social fraternity, and several national engineering honor societies.

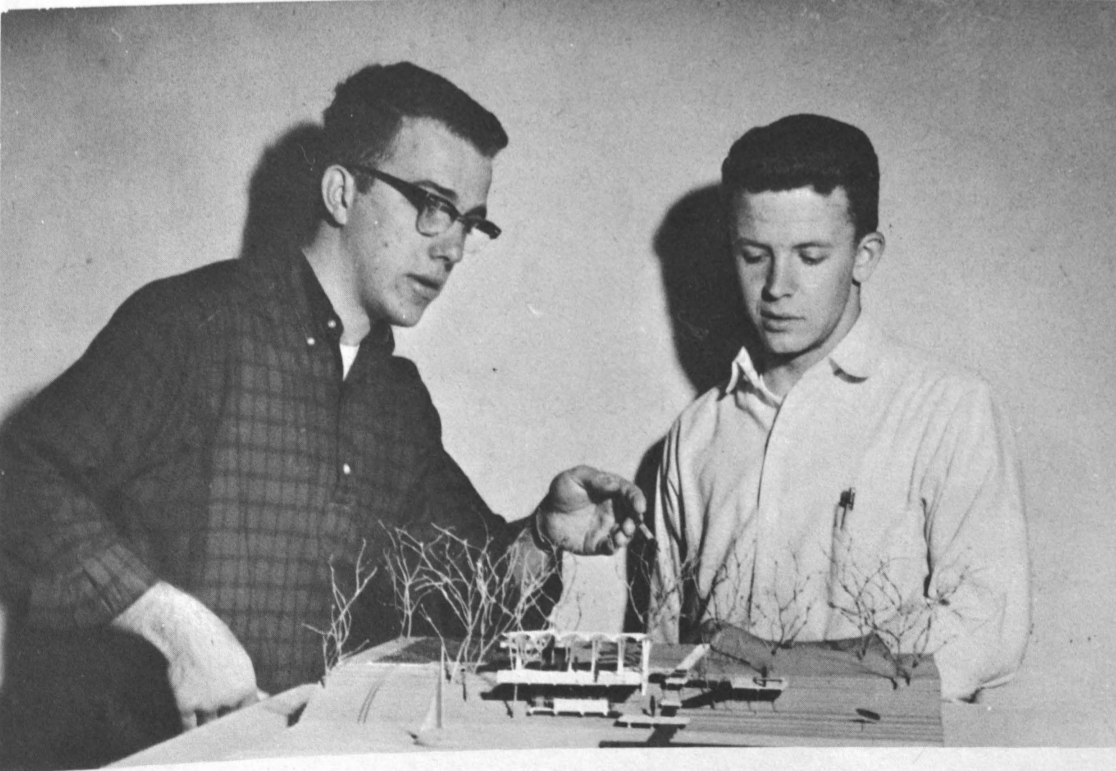
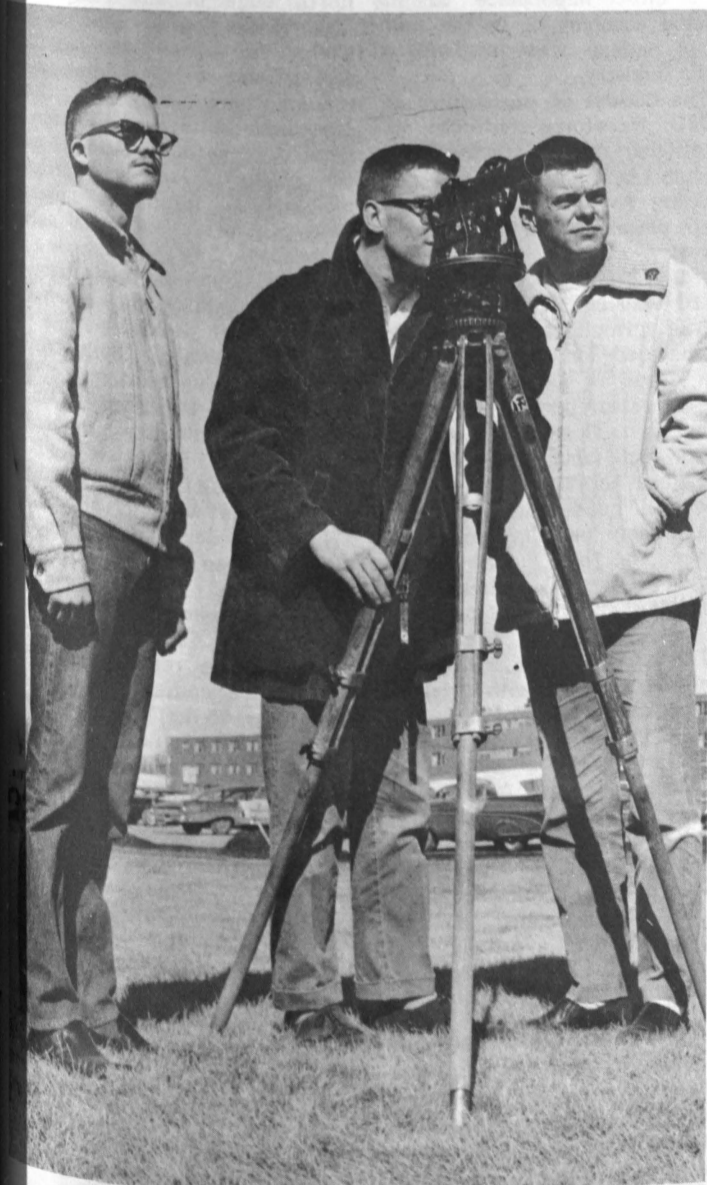
Students participate in such campus-wide activities as Shariivar, where many of the most dramatic exhibits are arranged by engineers.

One of the big events of the spring season is the campus celebration of the engineer-sponsored St. Patrick's day program. Engineers elect a St. Pat and a St. Patricia to head the festivities and the whole affair ends in a dance.



**BIG VIEW** of a tiny segment of the campus is gained by freshman engineer looking through the eye piece of a transit in a surveying course.

**SCALE MODELS** of building and grounds are laboratory projects for architecture students at NDSU.

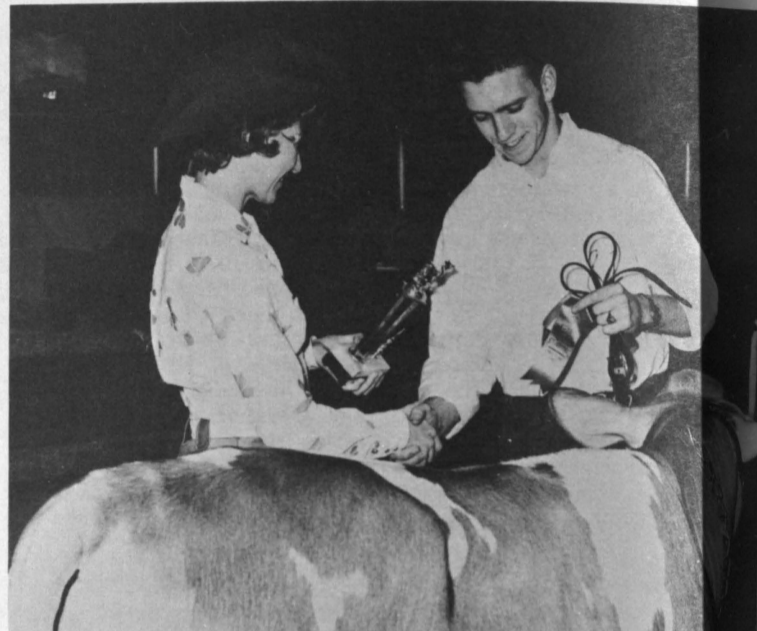


THE SPECTRUM  
NORTH DAKOTA STATE UNIVERSITY  
FARGO, NORTH DAKOTA

Non-Profit Org.  
U. S. POSTAGE  
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Permit No. 818  
Fargo, N. D.



**WALSTER HALL**, new \$750,000 building going up on campus, is still a skeleton. It frames the campus in this view.



**JUDGING AWARD** at Saddle and Sirloin Club's Little International livestock and crops show stimulates student interest and learning.



**RUST RESEARCH** of NDSU agronomists is aided by student work, and goes on year-around in special greenhouses.

## College of Agriculture Well Serves Growing, Changing Farm Industry

Agriculture is still the nation's number one industry. Just about 40 per cent of the people in the United States either earn their livings on farms or from farm-related industries.

This means, that while agriculture is changing, it is not declining in either importance to the national economy or in the number of persons who are involved in the industry.

The College of Agriculture at NDSU, therefore, continues its traditional role of serving agriculture by research and by training young people to take their places in the agricultural industry.

A new \$750,000 building, to be named Walster Hall after the late dean of agriculture, H. L. Walster, is scheduled for completion next fall. It will be a University agricultural research center.

The first floor will contain offices and laboratories for the department of soils. The second floor will house the department of agronomy and its crop laboratories. The third floor will be shared by the departments of animal husbandry, plant pathology and horticulture.

The structure of reinforced concrete surfaced with brick is taking shape west of the new pharmacy building which was built last year.

The agriculture engineering building also is scheduled for completion soon. This will mean addition of part of the second floor over two existing laboratories. Three classrooms, a small laboratory, some additional facilities and a brick facing for parts of the older structure are included in the plans.

**SOIL TESTING** service offered by College of Agriculture provides farmers with needed information and gives students both training and part-time work.

ed in the plans.

Another indication of the importance of agriculture on the NDSU campus, and in North Dakota, is the new \$2,000,000 science research center the Department of Agriculture is planning to build at NDSU. It will be erected on the north edge of the campus just west of the football stadium. The College of Agriculture has transferred land to the federal government for a building site and will lease additional land to it for the needed crop plots. Another quarter section of land was purchased by NDSU adjoining university land to provide additional needed crop space.

The College of Agriculture offers opportunity for study in many career fields. These include Economics, Soils, Crops, Education, Engineering, Entomology, Dairy Husbandry, Animal Husbandry, Poultry Husbandry, Horticulture, Bacteriology, Plant Pathology and General Agriculture.

Graduate work is offered in almost all departments, and the Ph.D degree can be earned in Entomology, Plant Science or Animal Science.

More than 450 students are enrolled in the regular College of Agriculture courses. In addition, each year 75 to 100 young farmers who are unable to attend regular classes attend an eight-week "short course" and increase their farming "know how."

NDSU serves mostly students from North Dakota, but it attracts young people who are interested in plains-type farming from all over the midwest and from many foreign countries. A number of its graduate students are from Europe and Asia.

NDSU also is the center for many agricultural gatherings and the headquarters for several farm service and farm-related activities like 4-H, county agent work and experiment stations.

