# INFORMATION BULLETIN



v.53 no.2 Dec. 1960 c.2

378.783 So87.1



SOUTH DAKOTA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS

COLLEGE STATION, BROOKINGS, SOUTH DAKOTA



### COLLEGE CALENDAR 1961-62

The regular college year is divided into Fall, Winter, and Spring Quarters of approximately twelve weeks each. The Summer Session is eight weeks.

#### 1961 SUMMER SESSION

June 13, Tue.—Registration, forenoon
June 13, Tue.—Beginning of classes 1:10 p.m.
July 4, Tue.—Independence Day, a holiday
Aug. 4, Fri.—Commencement Exercises 10:00 a.m.
Aug. 4, Fri.—Session closes at 5:10 p.m.

#### 1961 FALL QUARTER

Sept. 12-16, Tue.-Sat.—Freshman Days
Sept. 15-16, Fri.-Sat. a.m.—Registration of all students
Sept. 18, Mon.—Beginning of classes

Oct. 2, Mon.—Last day for registration for a course
Oct. 16, Mon.—Last day for incomplete makeup examinations

Oct. 16, Mon.—Last day a course may be dropped without penalty

Oct. 16, Mon.—Last day for submitting graduation cards for Fall

Oct. 21, Sat.—Hobo Day, South Dakota University

Oct. 23, Mon.—No classes

Oct. 27, Fri.—Mid-quarter reports due Nov. 11, Sat.—Veteran's Day, a holiday

Nov. 22, Wed.—Classes close 5:10 p.m. for Thanksgiving recess

Nov. 27, Mon.—Classes resume

Dec. 18, Mon.—Grades for those graduating due 12:00 noon

Dec. 18, 19, 20, Mon., Tue., Wed.—Final examinations

Dec. 20, Wed.—Graduation exercises 10:00 a.m. Dec. 20, Wed.—Quarter closes at 5:10 p.m.

#### 1962 WINTER QUARTER

Jan. 3-4, Wed.-Thur. a.m.—Registration Jan. 4, Thur.—Beginning of classes 1:10 p.m. Jan. 18, Thur.—Last day for registration for a course Feb. 1, Thur.—Last day for incomplete makeup examinations Feb. 1, Thur.—Last day a course may be dropped without penalty

Feb. 1, Thur.—Last day for submitting graduation cards for Winter

Feb. 9, Fri.-Mid-quarter reports due

Mar. 14, Wed.—Grades for those graduating are due Mar. 14-15-16, Wed., Thur., Fri.—Final examinations

Mar. 16, Fri.—Graduation exercises at 10:00 a.m. Mar. 16, Fri.—Quarter closes at 5:10 p.m.

#### 1962 SPRING QUARTER

Mar. 21-22, Wed.-Thur. a.m.—Registration
Mar. 22, Thur.—Beginning of classes at 1:10 p.m.
April 5, Thur.—Last day for registration for a course
April 19, Thur.—Last day for incomplete makeup examinations

April 19, Thur.—Last day a course may be dropped without penalty

April 19, Thur.—Last day for submitting graduation cards for Spring

April 20, Fri.—Good Friday, no classes

April 22, Sun.—Easter

April 23, Mon.—Classes resume

May 4, Fri.—Mid-quarter reports due

May 30, Wed.—Memorial Day, a holiday

May 31, Thur.—Grades for those graduating due 12:00 noon

June 3, Sun.—Baccalaureate

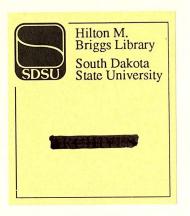
June 4, Mon.—Seventy-sixth annual commencement June 6-7-8, Wed., Thur., Fri.—Final examinations June 8, Fri.—Quarter closes at 5:10 p.m.

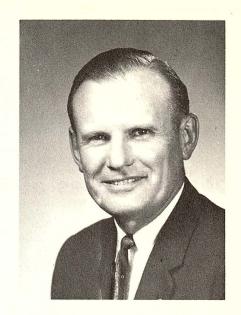
#### 1962 SUMMER SESSION

June 12, Tue.—Registration, forenoon June 12, Tue.—Beginning of classes 1:10 p.m. July 4, Wed.—Independence Day, a holiday Aug. 3, Fri.—Session closes at 5:10 p.m.

SOUTH DAKOTA STATE COLLEGE OF AGRICULTURE and MECHANIC ARTS BULLETIN

Volume LIII December, 1960 No. 2
Published Quarterly by the South Dakota State College, Brookings, South Dakota. Second class postage paid at Brookings, South Dakota.





Dreams and aspirations are pleasant, but getting fulfillment of those dreams and aspirations is real achievement. An architect and builder makes plans, but it takes care and dedicated work to make a structure a reality. You will find life is much like a building. You can make plans, but it takes dedicated work to bring them to fruition.

No one has yet devised as valuable a means of making plans come true as a college education. At college you can really prepare seriously to achieve the optimum of which you are capable. Actually, you may find your dreams were too limited in scope and find yourselves with even greater realizations of your

potential.

I have heard countless numbers express themselves as wishing they had been afforded, or grasped, the opportunity of a college education. Never have I heard anyone express regret at having been subjected to college training. You alone make the choice—satisfaction or regret. If you prepare yourself with college training, both you and society will be rewarded.

A.M. Brys

no, 2 Dec, 1960 c, 2 378, 783 So 87./ # 15378520

TV. 53

# opportunities at State College

What does State College offer? The fields on which State College places special emphasis are the sciences and the applied sciences, in agriculture, engineering, home economics, nursing, pharmacy, and many other applications such as research, teaching, printing and journalism, and physical education. But this emphasis does not and must not exclude the broadening effects of studies in history, government, literature, languages, music, social institutions and customs, and economic systems.

The college includes more than sixty majors organized in separate fie<sup>1</sup>ds and over four hundred teachers trained in these fields. Many of these teachers give part time to research work. Scientific laboratories and a good library provide the working tools for teachers and students.

The four-year courses lead to the degree of Bachelor of Science, the advanced work leads to the degree Master of Science, Master of Education or Doctor of Philosophy, and the terminal two-year courses lead to the Certificate of Completion. Four-year courses are offered in the six divisions of the college as described in the later sections of this bulletin.

Freshmen who are not certain as

to which course they wish to take may enroll in General Registration. This gives them time, during their freshman year, to sample the work of various departments. Also, through an orientation program and vocational counseling, they are given information and help which will enable them to select courses in which to specialize.

The student at State College can be assured of receiving a wellrounded education, regardless of the field in which he specializes. The college emphasizes the highest type of technical-professional training in all areas.

Pre-Professional Courses. Because of the broad offering necessary for the technical and professional courses available at State College, students wishing to prepare for admission into professional schools, such as colleges of medidentistry, law, veterinary science, forestry and theology will find the necessary pre-professional courses available at State College. The college is listed among institutions approved for pre-medical education by the council on Medical Education and Hospitals of the American Medical Association. Because State College is fully accredited by the North Central Association, the credits earned here will be accepted at full value in the various professional schools.

What Are State College graduates Doing? State College graduates have gone into practically every phase of human activity including law, medicine, the ministry, music, and art. But of course the large majority have entered technical and scientific work in agriculture, industry, teaching, or business. Public service including health service has attracted many, including the various fields of pharmacy.

Graduates are found in every state in the union and in many for-

eign countries.

The sound character of a State College education is indicated by the number who are teaching in other educational institutions including many of the largest, oldest, and best known. Some of these graduates have risen to important positions including department heads, deans, and presidents of such institutions. High school teaching attracts others. And of course good home making is one of the most essential occupations.

It is absurd to imply that graduation from any educational institution is a guarantee of later success. But college training does increase one's opportunities, and State College has broadened the outlook for more than ten thousand graduates who came to it as young men and women, mainly from modest South

Dakota homes.

Degrees and Honors. The bachelor of Science Degree is granted

students who finish one of the fouryear programs as offered in Divisions of Agriculture, Engineering, Home Economics, Nursing, Pharmacy, and Science and Applied Arts.

Students who finish a four-year course with high marks may be

graduated with Honors.

Two-year terminal curricula are offered in Agriculture and Science and Applied Arts. The Certificate of Completion is granted to those who complete an outlined two-year course.

ACCREDITATION. South Dakota State College is accredited by the North Central Association of Colleges and Secondary Schools and other accrediting agencies. Credits earned at State College are accepted at other accredited colleges.

More than 130,000 volumes are available in the Lincoln Memorial Library.



# admission procedure

THOSE INTERESTED in entering State College should write to the Director of Admissions and Records for "Application for Admission" and room reservation forms. Have your high school principal send a transcript of your credits to the Director of Admissions and Records when you have finished your high school work.

When your application for admission is on file and your transcript of credits has been received, you will be notified of your admission status.

Admission Requirements. Anyone who is a graduate of a four-year accredited South Dakota high school may enroll at State College. He will be admitted as a freshman upon presenting an application for admission, and a transcript from his school officials specifying the subjects, credits, and marks for all subjects. However, if the student does not present credit for all the subjects prescribed for entrance to the college course of study he wishes to pursue, he must make up the deficiency during his first year in college.

Students who do not present required credits may arrange with college authorities to make up college entrance deficiencies, for

which reasonable fees may be necessary. No college credit will be allowed for such work.

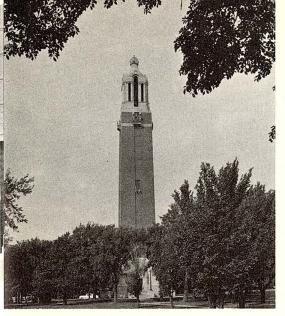
Of the 15 units required for entrance, some are prescribed, the remainder being optional. All students should have at least one unit in natural science and one unit in social science, which should include American History and Government. In exceptional cases students may be admitted as Specials by the Committee on Admissions. The required units are as follows:

For all divisions—3 units of English, 1 unit of algebra. For Pharmacy and Science and Applied Arts Natural Science Majors—1 additional unit of mathematics (plane geometry). For Engineering—1½ additional units of mathematics (½ higher algebra, 1 plane geometry).

Non-resident students who rank in the upper half of their high school graduating class will be admitted as Freshmen upon filing an Application for Admission and a transcript of high school credits. Those ranking in the lower half of their class must consult with the Director of Admissions and Records 60 days before they intend to enroll.

Students transferring from other colleges should have their application for admission and transcript of college credits on file with the Director of Admissions and Records 30 days before the opening of the quarter.





# costs are reasonable

#### AT STATE COLLEGE

STUDENTS enrolling for the first time at State College are required to pay a matriculation fee of \$5.00 which must accompany their application for admission. This fee is not refundable after the student has been accepted. It is paid only once.

Expenses for the average student for a college quarter are about as follows:

#### REGULAR QUARTERLY EXPENSES

| Tuition (out-of-state students add \$56.00)  | \$66.00     |        |
|--|-------------|--------|
| General College Fee  |             |        |
| Student Association Fee <sup>1</sup>   |             |        |
| Student Union Fee <sup>2</sup>   |             |        |
| Board (based on meals for seven days each week)3   | \$105.00 to | 135.00 |
| Board (based on meals for five days each week)3  |             |        |
| Dormitory Room <sup>3</sup>  | 48.00 to    | 72.00  |
| Books and Supplies (Estimated)   |             | 40.00  |
| Total  |             |        |
| DEPOSITS (First Quarter of Academic Year)  |             |        |
| Military Uniform Deposit (Men students only)  (Deposit less loss charges returned at end of school year) | \$20.00     |        |
| Dormitory Room Deposit   | 10.00       |        |
| (Deposit less any damage charges returned at end of school year)   |             |        |
| Total Deposits (Fall Quarter only)   | \$30.00     | 0      |

<sup>&</sup>lt;sup>1</sup>This \$7.65 includes a small amount for class dues, Collegian subscription, Jack Rabbit annual, admission to athletic events, debates, concerts, use of tennis courts, and other privileges.

Tuition, fees, deposits, and expenses are applicable as of December 1, 1960. The College reserves the right to modify any statements due to unforeseen circumstances.

A dormitory room deposit of \$10.00 is required of all dormitory students. This is returned at the end of the school year, less damage charges.

For men students only, a military uniform deposit of \$20.00 is charged. This is returned at end of school year, less loss charges.

This serves as a membership fee in the Pugsley Union.

3See statement on next page concerning "Room and Board."

Dorm life offers students an opportunity to make lasting friendships.



# students enjoy campus life

Room and board. All students must live in rooming places approved by the college authorities.

Cost of rooms in the dormitories ranges from \$144.00 to \$216.00 for the college year for each student, two in a room, depending upon the building in which the room is located.

Women students who are not residents of Brookings are required to room in the women's dormitories.

Freshmen and sophomore men students who are non-residents of Brookings are required to room in the men's dormitory unless formally excused from the requirements by the dormitories committee upon the request of their parents.

The cost of double rooms in private homes is \$5.00 to \$6.00 per week per person. Single rooms cost more.

Wenona Hall, Waneta Hall, Wecota Hall, and Wecota Annex are dormitories for women. These halls will accommodate 593 women students.

Scobey Hall, East Men's Hall, and Development Hall will accommodate a total of 606 young men.

Albert S. Harding Hall, dormitory for men, will accommodate 154

men students. Brown Hall will house 416.

Everything possible is done to make a real home for those who live in the dormitories. The students are given a large share in the government of the halls and are thus encouraged to form orderly habits and high ideals of conduct. The purpose of those in charge is to make the dormitories as attractive and homelike as possible, and to create the spirit of cooperation that is found in a real home.

Each room is provided with closets, two single beds, mattresses, two straight chairs, study table, dresser with mirror, tile floor covering, and window shades.

Each student should provide bedding, including a mattress pad, a pillow, two pairs of pillow cases, four sheets, and two blankets and bed spread; also six towels, clothes bag, and study lamp in the women's dormitories.

To reserve a room each applicant must remit \$10 to the cashier of the college with his agreement and application for room reservation in one of the college dormitories. This is held by the cashier as a breakage deposit. The unused part of this will be refunded at the end of the year.

This \$10 deposit is not refundable unless a valid excuse is given and approved by the Director of Student Housing or unless for some reason the student is not admitted to the college.

Valid excuse indicates a situation whereby a student is prevented from enrolling by circumstances beyond his control.

Freshmen men and women students who reside in the college dormitories are required to participate in the college contract meal service. This service provides 20 meals per week, Monday through Sunday noon. The meals will be served in the college cafeterias. The cost will be approximately \$400.00 for the college year.

Non-dormitory residents may eat under contract with the college food service or at the Pugsley Union, cafes, or private homes at

somewhat higher rates.

Resident nurses acting under the direction of the Student Health Service do everything possible to maintain health among the students and to care for them when ill.

A coffee break in the Pugsley Union.



STUDENT EMPLOYMENT. A large number of students each year succeed in obtaining work to help pay a part of their expenses while attending college, but no student should expect to earn all of his expenses, unless he plans to take more than the normal four years to complete his course.

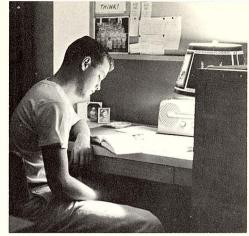
Prospective students should not expect to find work immediately unless promised work in advance. The college, through the Student Personnel Office, does what is possible to find work for needy, deserving students.

THE PUCSLEY UNION BUILDING. This is the center of social life and is primarily a student enterprise. It is maintained by and for the students, faculty and alumni as their college club, with facilities for service and pleasure. Every student, by payment of the union fee, is an active member of the union and has a voice in its direction.

Music. Music fills a large place in the regular curriculum, as well as the extra-curricular life of many students at State College. Every qualified student is eligible for a place in the band, orchestra, chorus, Statesmen, Pasquettes, and other musical organizations. College credit is given for successful performance in the musical organizations and a major in music is offered by the Music Department. Instruction is offered in voice, piano, organ, wind, and string instruments. Of note is the annual performance by the chorus and orchestra of Handel's Messiah and the light opera given

9





The four modern dormitories recently built on the State College campus provide spacious, comfortable surroundings in which to live and study.

during the year. The State College Band is a noted marching band and furnishes musicians for the annual band clinic which is directed by nationally known band leaders.

STUDENT ACTIVITIES AND ORGANIZATIONS. Of great importance to students is the opportunity which they have at State College to take part in various activities. Among these are dramatics, oratory and debate; the South Dakota Collegian, a weekly paper edited, published and printed by students; the Jack Rabbit, the college annual; various judging teams; as well as the many technical societies, service, and honorary organizations.

Each of these organizations offers much to the students, not only in furthering their efficiency in their chosen vocations, but also in developing social qualities of leadership which they often find extremely valuable following graduation.

Each student is a member of the State College Students' Association and, as such, is entitled to vote in 10 student elections and to campaign for office as in actual political campaigns. Students' Association activities include such things as sponsoring a campus-wide social program, intramural sports, and any activity which will affect the welfare or comfort of the students as a group.

AUTOMOBILES. The college recommends that students attending State College should not bring automobiles with them.

Very few students have need for an automobile, and the operation of one while attending college is not only expensive, but usually interferes with the student's college work.

The privilege of any student to operate an automobile on the campus will be withdrawn by the college if the student is on scholastic probation, and may be withdrawn for disciplinary reasons.

RECORDS AND REPORTS. The Office of Admissions and Records keeps

the official scholastic records of each student and furnishes reports to the student and his parents for the work of each quarter. A student or his parents may consult this office at any time to see the record, get information about general requirements and procedures, or any other questions concerning the scholastic record. Grade reports for each quarter are also furnished to the student's dean and his counselor. He is asked to consult with his counselor in case of scholastic difficulty.

STUDENT PERSONNEL SERVICES. An office of Student Personnel Services has been established in the college and under the direction of this office a number of services are offered to all students.

All new students are asked to be present during a new student registration period at the opening of the fall quarter. The program during this period is designed to help them get a good start in the college. It includes a series of tests, informational talks by the President and other college officials and student leaders, social affairs, a campus tour and an introduction to the regular registration procedure.

An orientation course is conducted for one quarter to carry on the introduction to college facilities and procedures. Study habits, college regulations, use of the library, the student health service, and similiar matters are discussed. During the first quarter each student meets weekly with his divisional group in a meeting conducted by his divi-

sional dean. In addition, the student is scheduled for a weekly meeting with his faculty counselor. This helps him to get acquainted with the counselor, and enables the counselor to know the student and to help him with any problems that may arise.

A testing and consulting service is provided, partly through the tests offered during the program for new students at registration and partly through tests that are administered as need appears. The student is offered help in interpreting such tests. Students who have doubts concerning thier interests or special abilities are urged to make use of this service.

Students who are not yet ready to select a curriculum for a degree in one of the six divisions of the college may register in "General Registration," where the Dean of Student Personnel is his chief classifying officer. This dean will advise him until he selects a curriculum and transfers to the appropriate division. The testing and counseling services are also available to help him choose his major field.

Other services available include assistance to veterans in their contacts with the Veterans Administration, assistance to those studying under the division of rehabilitations, foreign students, blind students, Indian students and students seeking part-time employment onor off-campus. Aid is also available to those wishing to apply for scholarships, loans, and to students desiring help with personal problems.



# division of agriculture

What constitutes an agricultural education? A Bachelor of Science degree in agriculture includes study in all branches of agriculture and in the basic sciences (such as chemistry, botany, zoology) that are closely related to agriculture. Your college education will also provide a variety of courses that help to make you "a well educated man." These courses include English, economics, sociology, psychology, public speaking and many others.

You will find that your studies at State College are not confined to classroom and laboratory work, but also include field trips, both on and away from the campus.

An important part of your college life at State College will consist of the many activities that develop 12 "polish" and leadership, which are valuable in all walks of life. You will want a well-balanced program of these activities which include athletics, music, social affairs (held mainly on weekends), religious training in student religious clubs and in Brookings churches, and leadership training in Ag Club, the Little International and many departmental clubs.

You will value forever the friendships you make with students and faculty from all parts of the country.

From this discussion of an agricultural college education, you can readily see that your four years at South Dakota State College will be interesting and profitable.

IN WHAT BRANCH OF AGRICULTURE SHALL I MAJOR? This is a question that faces all agricultural college students, because agriculture is such a broad field. The trend is toward specialization in one branch of agriculture, with a general knowledge of all branches. Stu-

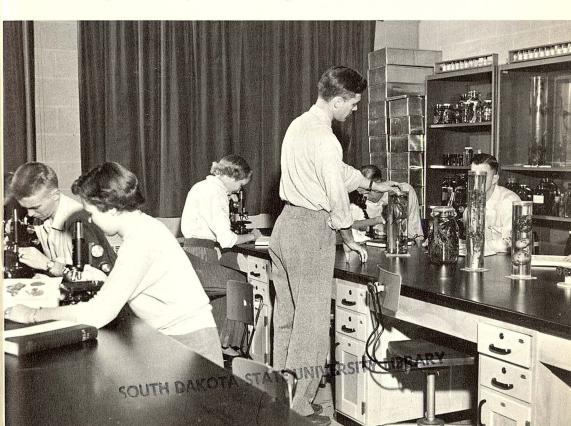
dents in graduate work may elect to take the "Curriculum in Agricultural Science." This curriculum is designed to give the student of agriculture a good background in the basic sciences such as bacteriology, chemistry, physics, mathematics, and zoology. Most students begin to specialize in their sophomore year. Students may select one of the following majors:

- 1. Agricultural Chemistry
- 2. Agricultural Education
- 3. Agricultural Journalism
- 4. Agricultural Science
- 5. Agronomy (Crops and Soils)
- 6. Animal Husbandry
- 7. Bacteriology
- 8. Botany
- 9. Dairy (Production or Manufacturing)

- 10. Economics (Agricultural Business, Agricultural Finance or Farm Management)
- 11. Entomology
- 12. Mechanized Agriculture
- 13. Horticulture
- 14. Poultry
- 15. Plant Pathology (Plant Diseases)
- 16. Range Management
- 17. Rural Sociology
- 18. Wildlife Conservation
- 19. Zoology

Forestry or Veterinary Science. If you are interested in either of these fields you may take two years of training at State College. Curricula are arranged to meet the early requirements of such specialized schools.

Laboratory work is necessary for the understanding of the natural sciences.



#### OCCUPATIONS FOR AGRICULTURAL GRADUATES

The following list includes only a few of the occupations available to agricultural graduates:

Farming and Ranching

1. General farming and ranching

2. Specialized farming, such as raising purebred livestock or certified seed. Also poultry and dairy farming.

3. Farm Management work

#### Teaching

1. In college

- 2. High school vocational agriculture
- 3. County Extension agent
- 4. Agricultural missionary
- 5. Preliminary for the ministry in rural communities

#### Research

- 1. In State Experiment Stations
- 2. In Federal Bureaus
- 3. In Industrial laboratories

Using a delicate balance an entomology student weighs the chemicals for compounding an insecticide.



#### Government

- 1. Soil Conservation Service
- 2. Bureau of Reclamation
- 3. Farmers Home Administration
- 4. Extension Service
- 5. Agricultural Research Service
- 6. Federal and State Fish and Game Departments
- 7. Social Work
- 8. Bureau of Census
- 9. Agricultural Marketing Service
- 10. Pure Food and Drug Administration
- 11. Foreign Agriculture Service

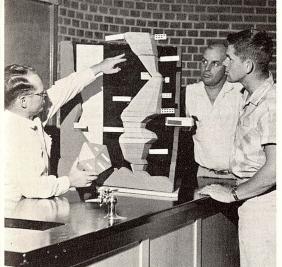
#### Commercial Field

- 1. Agricultural advisers for banks
- 2. Agricultural agents for railroads
- 3. Salesmen in many industries
- 4. Hatchery men
- 5. Elevator managers
- 6. Seed and nursery workers
- 7. Creamery managers
- 8. Florists
- 9. Livestock buyers
- 10. Implement company employees
- 11. Agricultural bacteriologists
- 12. Agricultural chemists
- 13. Agricultural engineers
- 14. Market analysts for companies serving agriculture
- 15. Agriculture statistics for industries related to agriculture

#### Journalism

- 1. Farm editors of newspapers, radio stations, and television
- 2. Farm magazines
- 3. Editors of rural newspapers
- 4. Advertising and publicity for industries related to agriculture







Top: Agriculture students learn how to determine the weed content of seed grain samples in the weed identification laboratory.

Second: Professor "Tex" Lewis employs a threedimensional model as an aid to teaching theories of range management.

Bottom: Research by the agricultural faculty gives their teaching greater meaning for their students.

# agricultural operation

A new curriculum which provides a schedule of college level instruction for students who expect to make farming or ranching their lifework. It includes a winter-quarter program, a two-year curriculum leading to a certificate, and a four-year program leading to the Bachelor of Science degree. If you wish broad training in agriculture with a wide choice of electives you may choose this program.



Informal dancing in the Union Ballroom is popular with the students.



The traditional Bum Stew, served in coffee cans on the campus is one of the unique events in connection with Hobo Day.



Highlight of the campus social scene is the annual Military Ball. Formal dress and military uniforms make it one of the most colorful affairs of the year.



The Jackrabbit Stampede gives a thrill.

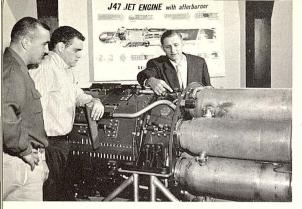
# student activities

State College students take an almost fierce pride in the initiative with which they conduct campus social and recreational activities. With hardly so much as an approving nod from the faculty or administration, they annually stage Hobo Day, the largest one-day event in South Dakota; write, edit, print and distribute a prizewinning newspaper, the Collegian; produce the Little International, agricultural and home economics exposition with more than 500 student participants; and stage an annual light opera. All of these in addition to a host of dances, intramural and varsity athletic events, plays, debates, a rodeo, musical events and parties which make up the wide variety of extra-curricular and co-curricular activities on the campus.



An important stop on the new freshman's itinerary is a trip to the students association bookstore.







The large variety of modern equipment in the State College engineering laboratories gives students a chance to work with their hands and see for themselves how scientific principles apply.

# division of engineering

CURRICULA are currently offered in five fields of specialization: Agricultural Engineering, Civil Engineering, Electrical Engineering, Engineering Physics, and Mechani-

cal Engineering.

These, as well as other fields of engineering, utilize the same basic concepts. Emphasis is placed upon the mastery of engineering fundamentals. Upon graduation the engineer has the opportunity to apply these fundamentals in the areas of research, development, design, production, construction, operation, maintenance, sales, management, and teaching. Frequently, combinations of some fields are encountered.

BREADTH OF INTERESTS. Employers of engineers are becoming increasingly aware of the humanistic and social sciences, and demand that an engineer be proficient not only in his technical field, but in English and the social amenities as well. Engineering training does not remove the obligation for intelligent

and constructive citizenship, nor the necessity for working with people as well as materials. A student's interests should be broadened, not concentrated, during his college career. For this purpose courses in English, public speaking, and economics are required in the curricula, and non-technical electives continue the expansion of interests.

The Civil, Electrical, and Mechanical, and Engineering Physics curricula are accredited by the Engineering Council for Professional

Development (ECPD).

AGRICULTURAL ENGINEERING. The youngest of the engineering professions, agricultural engineering is of primary importance in the Midwest, where farming is the key industry. The student in agricultural engineering may choose from a variety of specialized fields—power and machinery—farm structures—soil and water engineering—rural electric, and crop processing.

Agricultural industries employ engineers in research, field work,

and sales. State and federal agencies need agricultural engineers for teaching and extension work. Farming, retail equipment sales, and agricultural contracting provide opportunities for self-employment.

CIVIL ENGINEERING deals with the many areas of public works such as highways, irrigation and drainage, water supply, sewerage and waste disposal, bridges and buildings. Civil engineers are involved in the planning, design and construction of such projects. Their education includes the basic science and mathematics as well as applications of these fundamentals to the surveying, design and construction involved in the various projects.

The demand for civil engineering graduates is high. They find employment in many state and federal agencies, as well as with private firms that do engineering work. Civil engineers are able to see the contributions which they make to the welfare of man, as their structures are used by everyone in their daily life.

ELECTRICAL ENGINEERING. Primarily, the Electrical Engineer

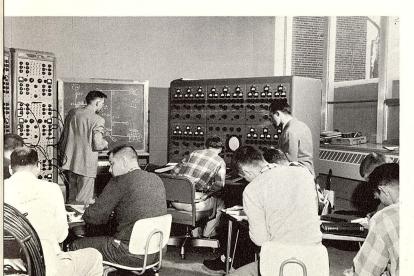
deals with electrical circuits, electrical machines, electronic devices, transmission line and space devices. The field of electrical engineering is divided into two main areas:

- (1) Generation, transmission and utilization of large amounts of electrical energy for power purposes.
- (2) Conversion, transmission and reception of information wholly or in part by electric and electronic means.

In the area of power generation, today's electrical engineers face the challenge of designing, building and operating as much new generating capacity in the next ten years as was built during the past seventy-five years.

The dawn of the electronic age adds still another horizon to the field of electrical engineering, with electronic devices playing a vital role in most automatic control systems, whether controlling a missile, an atomic power plant, or a small machine in a factory.

The development of the transistor and the miniaturization of electronic circuits is reducing the size and overall cost of computers so



Electrical engineering students work out a power distribution system on the network analyzer.

that their application in research and industry seems almost limitless.

Engineering Physics is a program of study designed to provide the background for work in the borderline areas between physics and engineering. In addition to the usual course and laboratory work in the basic science of physics, the student takes carefully selected courses in allied fields of engineering so as to become better acquainted with its applications. Having completed this curriculum, opportunities exist for employment in industrial or government laboratories engaged in research and development in such fields as nuclear energy, rocket propulsion, satellites, and solid state. A high percentage of the graduates either immediately or eventually find it desirable to continue their formal training for an advanced degree in Physics.

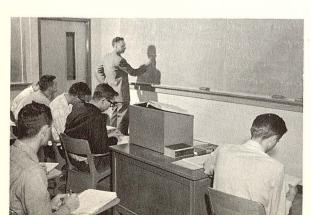
MECHANICAL ENGINEERING deals with the design, manufacture and application of machinery and associated equipment; with the production, transfer and dissipation of heat; and with the conversion of heat energy to power.

Our technological society is requiring more and more complex machinery to perform the tasks of mankind. Examples of such machinery and associated equipment include steam and gas turbines, internal combustion engines, jet and rocket engines, nuclear power plants, compressors and pumps, refrigeration and air conditioning systems, boilers, furnaces, aircraft, railway equipment, machine tools and control equipment.

As machines undergo a continuous process of modernization, and as new scientific breakthroughs occur, constant research is underway by mechanical engineers to solve new problems of stress, heat, speed, vibration and operating efficiencies.

Mechanical engineering graduates have the opportunity to perform in a great diversity of activities. These include research and development, design, private consulting practice, production, application, sales, and the operation and management of engineering enterprises.

PLACEMENT OF GRADUATES. Representatives of leading industrial concerns visit the campus each year to interview senior engineering students. A critical shortage of engineering graduates exists and this shortage is expected to continue for years; the number needed in modern industry is steadily increasing.



Mathematics is a tool of the engineer.



### division of home economics

The Division of Home Economics prepares young women and men to become successful homemakers, to accept many and interesting career opportunities and to assume responsibilities as citizens.

The desire for marriage and a successful home is the goal of most young people. It is to help young men and women achieve this goal that such courses as home management, child development, home furnishing, family nutrition, food preparation, clothing selection and household textiles are offered.

Practical experience with children is made possible on the campus through a living laboratory, the Nursery School, where many questions of human behavior can be answered through the observation

and guidance of the fifteen young children who attend the Nursery School.

A group living experience is provided all seniors in home economics through six-weeks residence in the home management house. Here students have an opportunity to apply learning to actual experiences in budgeting, buying, housekeeping, feeding a family and entertaining guests.

All students in home economics, through courses in food and nutrition learn the principles involved in feeding a family so that all family members may attain maximum well-being. In textiles and clothing students are introduced to the use and care of new fabrics, modern methods of clothing construction

and ways to plan and budget for the clothing needs of the individual and the family.

Students majoring in home economics education spend six weeks at an off-campus student teaching center. Here they observe teaching procedures and gradually assume full responsibility for a homemaking class. Students majoring in journalism also have an off-campus work experience in editing a small town newspaper.

Home Economics research is carried on in food and nutrition, and textiles and clothing. Some student help is utilized in these laboratories and provision is made for advanced study and special problems.



There are six majors in the Division of Home Economics at State College. The career possibilities are listed under each major.

### Major in CHILD DEVELOPMENT AND FAMILY LIFE

- 1. Teacher in a nursery school
- Operator of a children's shop books, toys, clothing
- 3. Writer of children's stories
- 4. Extension specialist
- 5. Research worker
- Recreation specialist with handicapped children



Editorial work on magazines involves checking layouts.

### Major in HOME ECONOMICS EDUCATION

- 1. Teacher
- 2. Home Demonstration agent
- 3. 4-H Club agent
- 4. Extension supervisor
- 5. Home service director
- 6. Social welfare worker
- 7. City or state supervisor
- 8. Radio and TV participant
- 9. Service in foreign countries

#### Major in FOOD AND NUTRITION

- 1. Dietitian
- 2. Home service director
- 3. Test kitchen worker
- 4. Researcher
- 5. Extension specialist
- 6. TV producer and performer
- 7. Social welfare worker
- 8. Public health nutritionist
- 9. Food promoter for commercial concerns
- 10. Food processing inspector
- 11. Consumer consultant for chain store or food company
- 12. School lunch supervisor



Part of the junior executive training program in department stores is preparing a manikin for display.



Many commercial positions require techniques in demonstrating foods.



Painting class in nursery school.

#### Major in HOME ECONOMICS **JOURNALISM**

- 1. Magazine editor
- 2. Newspaper worker
- 3. Advertising writer
- 4. Publicity writer 5. Radio producer
- 6. Television program director
- 7. Public relations specialist
- 8. Promotional worker for commercial concerns

#### Major in TEXTILES AND CLOTHING

- 1. Buyer and merchandiser
- 2. Fashion coordinator
- 3. Extension specialist
- 4. Textile designer
- 5. Budget consultant
- 6. Personal shopper

The homemaker uses her knowledge of home economics every day.



- 7. Demonstrator for pattern or equipment company
- 8. Radio and TV lab technician

#### Major in RESTAURANT MANAGEMENT

- 1. General manager
- 2. Assistant manager
- 3. Food production manager
- 4. Menu maker
- 5. Purchasing agent
- 6. Storeroom supervisor
- 7. Food cost control supervisor
- 8. Bakery supervisor
- 9. Dining room supervisor
- 10. Merchandising supervisor
- 11. Personnel director
- 12. Resort manager

Five years after graduation more than 90% of home economics graduates are married.





# division of nursing

The Division of Nursing offers a four-year course in nursing which prepares young men and women for first level positions in hospitals and health agencies. Employment may be found in general hospitals, special hospitals, medical clinics, military service, public and private schools, industries, and public health agencies.

The entire program, including Public Health Nursing, is accredited by the National League for Nursing.

These careers which are open to the professional nurse offer much personal satisfaction and an opportunity for success and advancement. The demands for qualified persons in the various fields of nursing are constantly increasing.

Students who pursue this course may be high school graduates or 24 registered nurses who wish to obtain a broader professional education. The course is four academic years in length (thirty-six months) and meets the requirements of the law of the state of South Dakota as well as the majority of the laws in other states. All four years of the program are guided by the instructional staff of the division of nursing. The traditional requirement of working for the hospital in exchange for room and board has been abandoned and the college pattern of self-maintenance has been adopted.

This does not preclude the student from working if she so desires, but it does offer a better control of the learning experiences. There is a constant demand for the nursing student to work as a nurses' aide during the summer sessions, holidays, and weekends. The law of South Dakota prohibits working in a hospital in any other capacity, since all who nurse for compensation must be licensed.

Costs of this educational program are low, since the only additional costs to the nursing students are the amounts spent upon uniforms (approximately forty dollars) and travel costs to the units. The freshman and sophomore years are spent on the campus where an up-to-date nursing laboratory is maintained, and it is here that the students may practice their new skills on the model patient "Mrs. Chase." Sometime in their sophomore year the students will enroll in courses requiring clinical (hospital) experience. These hospitals and/or health agencies have been carefully chosen by the college. Nursing faculty members accompany the students

to these units to instruct and guide them in their learning experiences. Thus an opportunity is provided for the student to see good nursing care practiced by registered nurses as well as an opportunity to learn good nursing care. During this time the student will live in College approved housing at rates similar to those of dormitory housing on campus. All college rules will prevail during this time. A health program is set up under the guidance of the College health nurse. All students are required to be immunized against preventable diseases prior to any hospital experience.

Throughout the program, liberal arts and general education courses are mingled with the professional courses to provide a cultural background. Many of the professional courses are integrated to give the nursing student a good understanding of the continuity of medical and

nursing care to the public.

The registered nurse who enters this program is given an opportunity to meet her needs in developing a broad professional background. Her transcript is evaluated carefully and a program planned for her early in her first quarter at the college. The length of time to complete the program will vary but in general will require from six to eight quarters of college work. The applicant is encouraged to take the Graduate Nurse Qualifying Examination prior to entrance or during the first quarter.

The programs differ somewhat for the Registered Nurse student and the basic student, but both have essentially the same purpose; to assist young women to obtain a broad professional background in

nursing.

Students are eligible to participate in the Army or Navy Nurse

Program.

Placement of graduates in nursing is assured. The college receives far more requests than can be filled. The students have a wide choice locally and nationally. As their experience increases, opportunities are also available for foreign service.

Nursing students get practical training in the skills of their profession during a period of study at one of the hospitals affiliated with the State College nursing program.





Pharmacy students at work in a modern dispensing laboratory.

# division of pharmacy

This division offers a five-year course in Pharmacy.

The five-year course in Pharmacy affords an opportunity for students to specialize in retail pharmacy.

Approximately eighty per cent of the graduates in pharmacy are engaged in retail pharmacy. This branch of pharmacy offers excellent opportunities to both young men and women. Many highly successful drug stores in South Dakota and in our neighboring states are owned and operated by graduates of the Division of Pharmacy.

At the present time there are about 55,000 pharmacies or drug stores in the United States and there are about 112,000 registered pharmacists. Eight thousand of these are women.

An increasing number of pharmacists are now employed in hos-26 pital pharmacies. The work that they do in hospitals is almost entirely professional. The surroundings are pleasant and the hours are short. It is a very attractive field for young women.

The work of the retail pharmacist is very important. It gives him an opportunity to be of service in numerous ways.

Graduate scholarships at South Dakota State College and in some of the larger colleges of pharmacy are open to qualified students who have received their B.S. degree. A number of our graduates are to be found in this field working for either their M.S. or Ph.D. degrees. Responsible, high-paying positions are open to those having advanced degrees.

Seven large modern laboratories with the latest in pharmaceutical equipment are available for our students. The faculty is well trained and all have advanced degrees in their particular fields. They are all fully registered pharmacists.

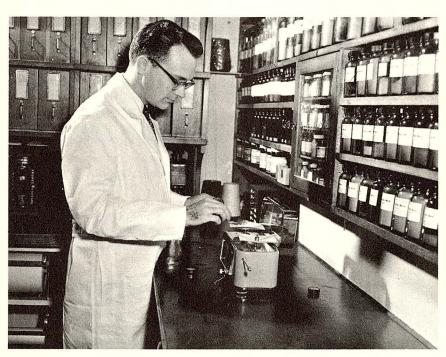
Tau Chapter of Rho Chi, an honorary pharmaceutical society; Chi Chapter of Kappa Epsilon, a fraternity for women students; Gamma Kappa Chapter of Kappa Psi Pharmaceutical Fraternity, and a student branch of the American Pharmaceutical Association are important factors in student life.

The Division of Pharmacy is accredited by the American Coun-

cil on Pharmaceutical Education. It is also a member of the American Association of Colleges of Pharmacy.

Our graduates are found in many fields, such as medicine, dentistry, chemistry, food and drug laboratories, retail drug stores, hospital pharmacies, wholesale manufacturing laboratories and as medical representatives for large companies engaged in the manufacture and distribution of drugs. The demand for our graduates has always exceeded the supply.

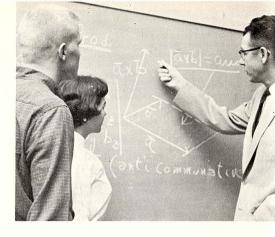
The Pharmacy division maintains a dispensary where students may have their doctor's prescriptions filled at cost of materials.



# division of science and applied arts

THIS DIVISION offers four-year de-■ gree courses in the biological sciences, the physical sciences, the social sciences, journalism, industrial arts, physical education for both men and women, and in the fields of art, English, foreign languages, music, and speech. Students wishing to enter the teaching profession may qualify for the various teaching certificates by taking the appropriate courses offered by the Education department. Courses needed for admission to the professional schools, such as law, medicine and dentistry are also offered in the Division of Science and Applied Arts. Science and Applied Arts courses are also intended to provide the general education background for the students majoring in Agriculture, Engineering, Home Economics, Nursing, and Pharmacy.

BIOLOGICAL SCIENCE PROGRAM. Students may earn the Bachelor of Science degree in bacteriology, botany, entomology, plant pathology, and zoology. Graduates in these fields can qualify for teaching high school science by taking their elective courses in professional education. They may also qualify for ad-



mission to schools of medicine and dentistry or for post-graduate work in a specific field.

PHYSICAL SCIENCE PROGRAM. Under this program degrees are offered in chemistry, mathematics, and physics. A program leading to the degree in Clinical Laboratory Technology listed under the chemistry department is also offered. In the latter program the students spend three years at State College and one year (calendar year) in an accredited school of medical technology. Upon graduation these students qualify as registered medical technologists and can secure positions as medical technologists in hospitals, clinics, and in health laboratories.

Graduates in chemistry, mathematics, and physics are much in demand by industry, government service, and by the educational institutions employing graduate assistants. Many continue their education to advanced degree levels.

Social Science Majors. Students interested in the social sciences may specialize in economics, history, political science and government, psychology or sociology.

Opportunities for employment include banking, general business, government service, teaching, and non-professional social work. Graduates are well prepared to work for advanced degrees in these fields.

Majors in English, Foreign Lancuages, Music, and Speech. In view of the great demand for high school teachers of English, Foreign Languages, music and speech, the college offers majors in these fields. The basic course requirements for these majors are sufficiently broad to provide a sound general education as well as sufficient specialization to qualify the graduate for high school teaching or for post-graduate work.

JOURNALISM DEGREES. State College is one of the few institutions in the United States which offers a full-fledged program of study and training in printing management and in journalism.

Students electing this program are given a well-rounded background in rural sociology, economics, and in the technical phases of editing, printing, and in printing plant management. As a result they are prepared to assume any or all of the responsibilities of the newspaper publisher.

Physical Education Major. Because of the increased emphasis on physical fitness and health education as the result of our experience in World War II, State College was authorized to offer a physical education major for men and women students. A well-rounded program, combining all phases of physical education as well as coaching, is

provided. State College has a well-trained staff and excellent equipment to carry on this work. Students may also take a major in physical education with the emphasis on physical therapy.

Individual and intramural sports competition is promoted for all



Students in human physiology learn body functions through the study of bone structures, muscles and nerves.

Participation in State College drama activities is not restricted to students studying in the fields of speech and dramatics, but is open to any student who wants to take part.





Jack Rabbit marksmen score bullseyes in tourneys.

students. Equipment and facilities for handball, softball, football, basketball, tennis, golf, baseball, volleyball, table tennis, trampoline, tumbling, wrestling, boxing, badminton, horseshoe, and archery, are available.

Intramural leagues offer physical activity to all students regardless of physical ability; while a highly organized inter-collegiate sports program offers varsity competition with other outstanding colleges.

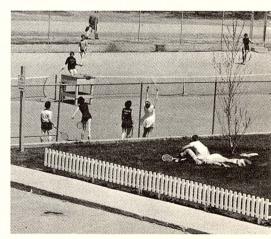
Major in Applied Art. Another program of instruction that has recently been developed is that of applied art. By completing the art courses required of home economics majors and additional elective courses, students may specialize in costume design, interior decorating, or applied design. Courses in painting are available.

INDUSTRIAL ARTS. A four-year program leading to the degree of Bachelor of Science in Industrial 30



Learning a foreign language in the languages laboratory.

State's nine tennis courts are popular in fall and spring.



Arts is offered. Major emphasis is placed on the training of industrial arts teachers for high schools but graduates also find employment in industry and construction trades.

MINOR FIELDS. Sufficient work is available to qualify the student for a college minor in secretarial science. The completion of this minor qualifies graduates for teaching business education courses in high school.

PREPARATION FOR TEACHING. Students wishing to prepare themselves for teaching in any one of the above mentioned fields may meet the certification requirements of South Dakota and other states by completing prescribed courses in professional education. Complete programs for training teachers in Smith-Hughes home economics, industrial arts, and agriculture are available to students registering in other divisions of the college.

#### JOB OPPORTUNITIES FOR SCIENCE AND APPLIED ARTS GRADUATES

Some indications of the variety of job opportunities that are open to Science and Applied Arts graduates are shown in listing the types of jobs held by our recent graduates.

The largest number entering any profession has been those going into teaching. The subject matter taught by these graduates includes: physical education, social studies, science, mathematics, English, speech, industrial arts, music, secretarial science, library, and driver education.

The second largest group enter-

ing a specific profession are the journalism graduates. These men and women have taken positions as journalists, or printers and journalists on daily and weekly newspapers, as assistant editors and editors of magazines, editors of business magazines, in radio work and in other types of public relations activities. Others have taken jobs as press association representatives and a few have started their own publishing houses.

Other jobs which Science and Applied Arts students have taken include medical technology, library work, statisticians in state or national civil service, bacteriologists or chemists in state health laboratories, business jobs with oil companies, banks, insurance companies, secretarial positions, and jobs in industry as salesmen, technicians and research workers. A few have gone into social service work, interior decorating, and religious service. A fairly large number have entered the military services, as officers.

A considerable number of students have gone on for additional graduate or professional training. Some were admitted to medical and dental schools, law schools, and theological seminaries while others are working toward advanced degrees in such fields as: economics, business administration, chemistry, physics, journalism, bacteriology, sociology, public administration, history, English and art.

There is virtually no field of economic or professional endeavor in which State College graduates are not engaged at the present time. SOUTH DAKOTA STATE COLLEGE
College Station, Brookings, South Dakota

Second Class matter



For further information write to:

Director of Admissions and Records SOUTH DAKOTA STATE COLLEGE College Station & Brookings & South Dakota