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UNIVERSITY *of* MINNESOTA

The School of Agriculture
Courses in Agriculture and Home Economics
Part I

Announcement of Courses for the Years 1944-1946

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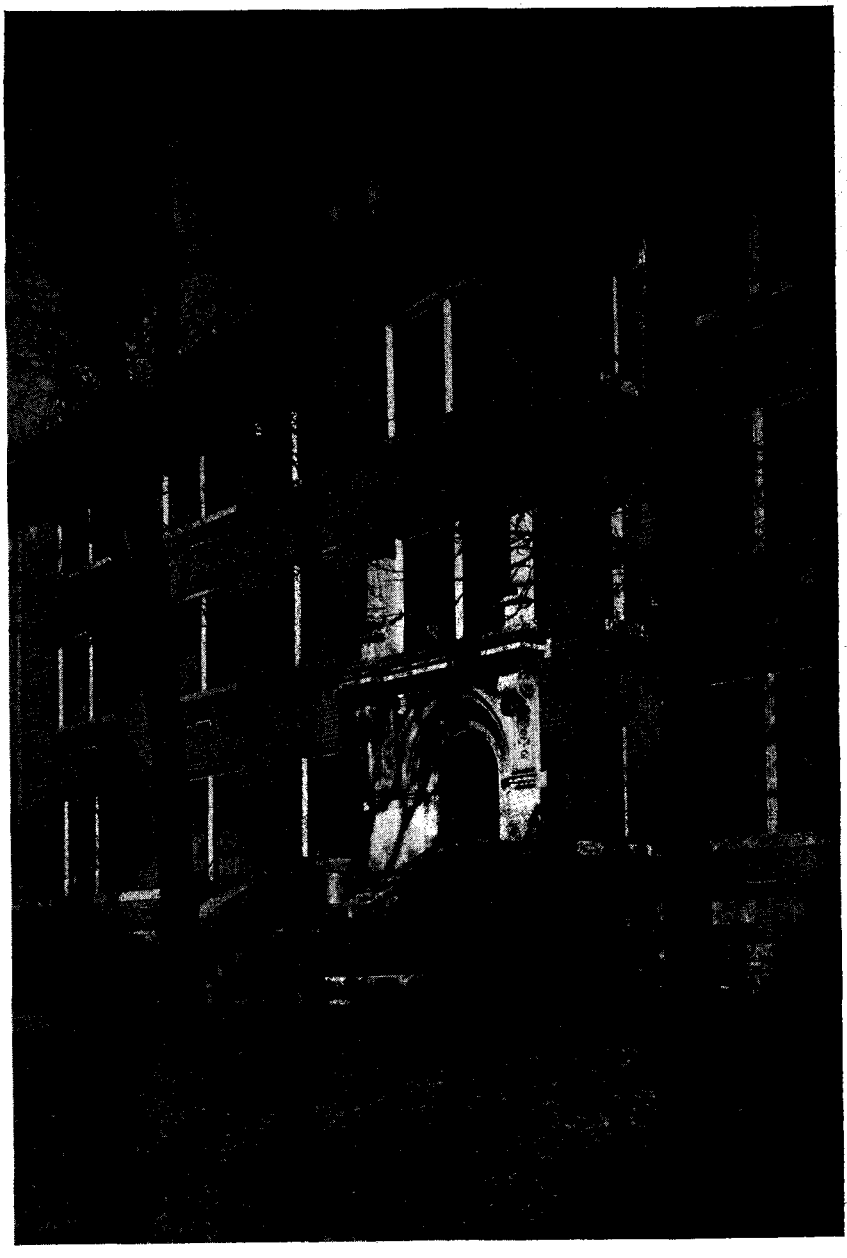


Dexter Hall
One of the three dormitories for boys

THE SCHOOL OF AGRICULTURE

FACULTY

ADMINISTRATION

Walter C. Coffey, M.S., LL.D., President, University of Minnesota
Clyde H. Bailey, Ph.D., Dean and Director of the Department of Agriculture
John O. Christianson, B.A., D.Sc., Superintendent, School of Agriculture and Director of Agricultural Short Courses
William S. Carlson, Ph.D., Director of Admissions and Records (on leave)
True E. Pettengill, M.S., Acting Director of Admissions and Records and Recorder
Johanna Hognason, B.A., Matron, Boys' Dormitories
Laura A. Matson, M.A., Matron, Girls' Dormitories
Harriet W. Sewall, B.A., Librarian

AGRICULTURAL BIOCHEMISTRY

William F. Geddes, Ph.D., Acting Chief; Harold V. Lindstrom, Ph.D.

AGRICULTURAL ECONOMICS

Oscar B. Jesness, Ph.D., Chief; Truman R. Nodland, Ph.D., George E. Toben, M.S.

AGRICULTURAL ENGINEERING

Arthur J. Schwantes, M.S. (A.E.), Chief; Clarence H. Christopherson, M.A., J. Grant Dent, James B. Torrance, B.S. (Agr.), Arthur G. Tyler, B.S. (M.E.), Hall B. White, M.S. (A.E.)

AGRONOMY AND PLANT GENETICS

Herbert K. Hayes, D.Sc., Chief; Carl Borgeson, M.S., Otto W. Swenson, Horace L. Thomas, Ph.D., Yien Tsiang, Ph.D.

ANIMAL AND POULTRY HUSBANDRY

Walter H. Peters, M.Agr., Chief; Philip A. Anderson, B.S. in Agr., Thomas H. Canfield, M.S., Alfred L. Harvey, Ph.D., Hubert J. Sloan, Ph.D., Laurence M. Winters, Ph.D.

DAIRY HUSBANDRY

James B. Fitch, M.S., Chief; Lester O. Gilmore, Ph.D., Thor W. Gullickson, Ph.D., William E. Petersen, Ph.D.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

Clarence E. Mickel, Ph.D., Acting Chief, Maurice C. Tanquary, Ph.D.

FORESTRY

Henry Schmitz, Ph.D., Chief

HOME ECONOMICS

Wylle B. McNeal, M.A., Chief; Carlotta M. Brown, Mary Frances Inman, M.S., Hedda Kafka, M.A., Ella J. Rose, Ph.D.

HORTICULTURE

William H. Alderman, B.S.A., Chief; Troy M. Currence, Ph.D., Arthur E. Hutchins, Ph.D., Lewis E. Longley, Ph.D., Theodore S. Weir, M.S., James D. Winter, M.S.

PHYSICAL EDUCATION AND ATHLETICS

Joseph A. Nowotny, B.S., Director; Marie F. Eibner, B.S.

PLANT PATHOLOGY AND BOTANY

Elvin C. Stakman, Ph.D., Chief; Alvin H. Larson, B.S. in Agr., Matthew B. Moore, M.S., Frank V. Stevenson, M.S.

PUBLIC HEALTH

Ruth Boynton, M.S., M.D., Acting Head; Marie I. Bestul, R.N., B.S., Richard G. Bond, M.S., J. Horton Daniels, B.A., M.D., Phillip D. Kernan, M.D.

RHETORIC

Ralph G. Nichols, M.A., Chief; Monica Langtry, B.A., Ella Oerting, Ph.M.

SCHOOL (GENERAL)

John O. Christianson, B.A., D.Sc., Superintendent; David W. Boland, B.Mus., Ivar Glemming, M.A., Johanna Hognason, B.A., Elmer M. Johnson, B.S., Peder L. Johnsrud, B.S. in Agr., Thomas Larimore, Laura A. Matson, M.A., Ralph E. Miller, M.S., Doris E. Nelson, B.S., Victor A. Newcomb, M.A., Phyllis Nordquist, B.Mus., Dean Wenstrom, M.A.

SOILS

Clayton O. Rost, Ph.D., Chief; John M. MacGregor, Ph.D.

VETERINARY MEDICINE

Willard L. Boyd, D.V.S., Chief; Reuel Fenstermacher, D.V.M., Howard C. H. Kernkamp, D.V.M., M.S.

The School of Agriculture

GENERAL INFORMATION

Over fifty-six years ago there was established at University Farm, St. Paul, the first agricultural school as a part of a university in America. The objectives of that school were to train farm people in the business of agriculture and homemaking, and to train them in a philosophy of rural life which would enable them to work together in the interests of better farm homes and communities. Throughout this fifty-six-year period the school has maintained that objective. Any farm young person, regardless of previous training, may here find an opportunity for getting further education in his or her life work.

The School of Agriculture at University Farm is a type of school that is unique in this state and nation. It corresponds more nearly to the Danish folk schools than anything else in America. The School of Agriculture is a finishing school, a school of specialization for those who intend to carry on with farming and homemaking. For that reason the

Class in Canning

School of Agriculture plays an important part in the agricultural education program of the state. There are thousands of farm young people throughout the state of Minnesota who are fifteen years of age and over who have not had a high school education; either they were not interested in high school or did not have the opportunity to get such training. For those persons the School of Agriculture offers real opportunity to have all the advantages offered by a great university and to receive the best training for life. Also, it serves those high school graduates who do not intend to go through four years of college, but who do wish to supplement high school training by a couple of years at University Farm before taking up the business of farming and homemaking.

ADMISSIONS

Before coming to the school, students should correspond with the superintendent, School of Agriculture, University Farm, St. Paul 8, Minnesota, to make the necessary preliminary arrangements for registration.

All male students are required to have had one year of farm experience before entrance to the school.

For the duration of the war, students will be admitted at fifteen years of age.

Students who have completed eighth grade work, or its equivalent, in the common schools are admitted without examination. Persons desiring to make application for admission to the school should write to Superintendent J. O. Christianson for an application blank which should be filled out and returned. Diplomas should not be sent. Students from

Student Leaders Plan School Activities

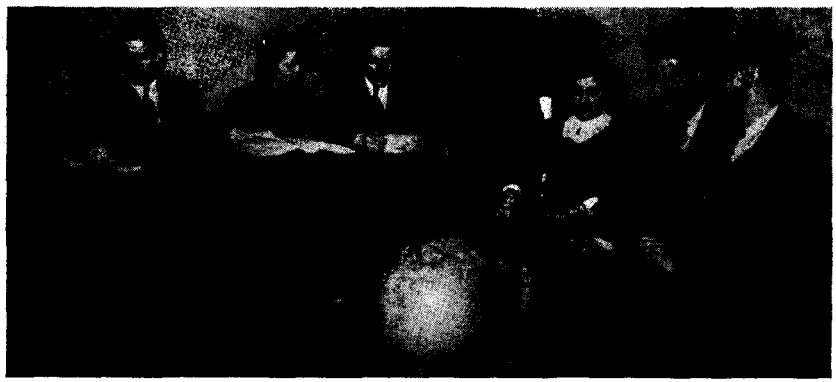
city or grade schools must present a dismissal card from the last school attended; they will not be admitted before finishing eighth grade work, nor until their former school records have been passed upon. These records must be presented at least three weeks prior to the opening of the school and must be accompanied by letters of recommendation.

Applicants of mature years who cannot meet the above entrance requirements will be admitted for special programs. Such students can graduate when the entrance requirements, as well as the requirements of the prescribed course, are fully met.

BUILDING A SOUND FOUNDATION

The School of Agriculture emphasizes human relationships and the intangible values and forces that in the long run determine the happiness of an individual and of a people. It is felt that the greatest need in any worth-while education is a sound foundation of moral and spiritual values. Factual information is of little use unless it is coupled with a better understanding of those social and moral forces which have been,

and are, basic to all civilization. For that reason, the School of Agriculture provides such training and experience for the student body as is most helpful in the development of a Christian philosophy of life and develops a sense of values which will aid each student in working with and getting along with others. It may well be said that the objective of the school is to teach people how to get along together and how to work together—in fact, such is the final objective of education. In addition to



The International Relations Club

the teaching of technical work in the various lines of agriculture, emphasis is placed upon music, upon dramatics, upon psychology, upon leadership and group activities, and upon co-operation in all its various phases of producer and consumer co-operation.

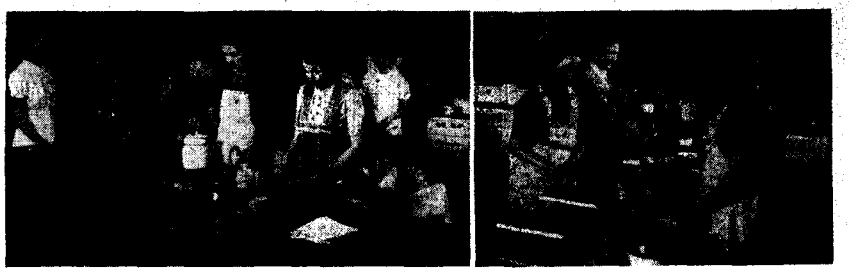
REQUIREMENTS FOR GRADUATION

The diploma of the School of Agriculture is granted on the completion of:

1. The prescribed course of study, including all of the required work and enough elective work to make 111 credit hours for agriculture students, 3 of which must be earned in summer project work taken each summer after the student has been in residence. Not more than 9 credits of project work may be counted toward graduation. Home economics students are required to complete 108 credits for graduation. At least 36 of the credits required for graduation must be earned by class attendance in this school.
2. Physical education, 1 credit hour for each term of residence.
3. Social problems for boys, 2 credit hours, or social training for girls, 2 credit hours.
4. An honorable standing in deportment.

HOME PROJECTS

Putting science into practice is the aim of the School of Agriculture. The school is organized on a plan which provides for teaching agriculture through six months of study at the school, October through March, and six months of supervised home project work on the farm. Home project work is advised for every student in the school but is as yet



A Class in Meal Preparation

required for graduation of the boys only. The purpose of the home project work is to give the pupils an opportunity to apply some phase of their classroom instruction to the operation of a farm or farm home.

The students may have a free choice as to the nature of their projects but are advised to choose those connected with the class work being taken. Registration should be completed before the student leaves the school in the spring. At the time of registration a project book with forms suitable for recording the necessary data will be provided.

During the summer season the work of the students will be inspected by instructors from the school in so far as possible. The project book must be submitted to the classroom instructors and be graded by them and must then have final approval of the Home Project Committee. Home project work cannot be accepted for credit from students who are not properly registered before starting upon the project.

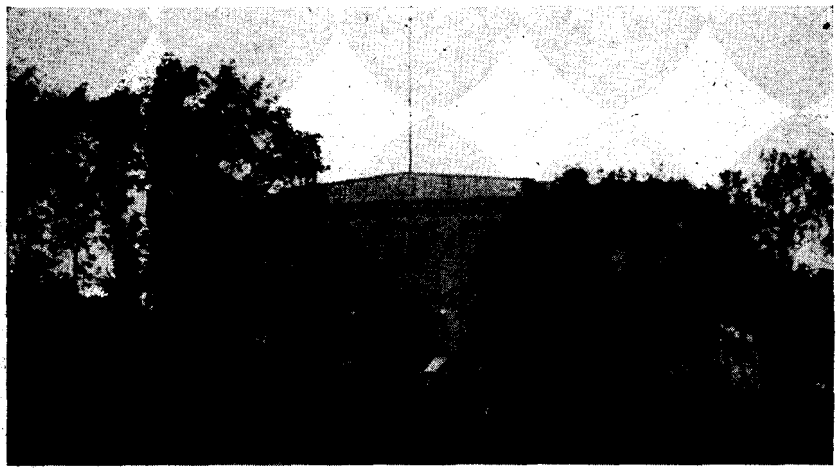
Three credits of home project work are all that any student should attempt to earn in one season. These may be counted toward graduation from the school, or, in the event that a student expects to enter the College of Agriculture, Forestry, and Home Economics, they may be used as one unit toward entrance to the college. A special bulletin on home projects may be obtained from the superintendent's office.

FACILITIES OF ENTIRE UNIVERSITY

One outstanding advantage that young men and young women who attend the school have is that they receive instruction from the outstanding leaders in whatever field they are interested. For instance, many of those who teach in the regular four-year degree course of the College of Agriculture, Forestry, and Home Economics also teach the

A Class in Decorative Needlework

students in the School of Agriculture. There is no other school that can provide the opportunity for outstanding people on its faculty that the School of Agriculture at University Farm does. This is made possible because of the school's location right at the University Agricultural campus where all the facilities of the entire University are available.



The School Gymnasium

COST OF ATTENDING

The school year is made up of two terms of three months each, the fall term beginning the early part of October and ending around Christmas time, and the winter term beginning the first part of January and ending the latter part of March. The total cost per term of three months, including board, room, laundry, books, tuition, and entertainment, is approximately $85-$90.

TABLE OF CHARGES

Tuition fee, per term	
Resident of Minnesota	$ 3.00
Nonresident	6.00
Deposit, as guarantee for the return of books and equipment	5.00
Incidental fee	10.20
Textbook rental fee (for those not desiring to purchase their books) per term	1.50
Music fee, per course (private lessons if desired)	6.55
Room in dormitory, per term (price subject to change)	16.00
Board—	
First term (price subject to change)	51.25
Second term (price subject to change)	55.75
Laundry, per term (price subject to change). Required of all in dormitories	4.00
Gymnasium suits—	
Boys (price subject to change)	2.00-3.00
Girls (price subject to change)	1.50
Average cost drawing instruments, notebooks, stationery, and supplies, per year	3.00-5.00

The $5 deposit fee, which is required at the time of enrolling, is refunded at the close of the school year when the student has returned all books and equipment satisfactorily. Each student is required to pay for

breakage of apparatus used in practical work. The total cost for board will vary according to length of term.

The approximate payments to be made to the school at the time of registration are:

	Fall Term	Winter Term*
Student in dormitory		
Resident of Minnesota	$90.95	$90.45
Nonresident	93.95	93.45
Day student		
Resident of Minnesota	19.70	14.70
Nonresident	22.70	17.70

The expenses given above are to be paid in full at the beginning of the term unless the student desires to pay his board and room by installments. Permission to pay by installments must be secured from the superintendent's office. The first installment is due at the beginning of the term when the tuition fee and the deposit of $5 are paid, making a

Agricultural Engineering Laboratory

total payment then of about $54. The second and third installments on board and room are payable in advance on the tenth of each month.

By this installment plan, the payments run approximately as follows:

	Fall Term			Winter Term*		
Student in dormitory	1st	2nd	3rd	1st	2nd	3rd
Resident of Minnesota	$54.30	$28.50	$8.15	$56.55	$26.00	$7.90
Nonresident	57.30	28.50	8.15	59.55	26.00	7.90

* If not in attendance first term, add $5 as a deposit fee to the payment made at the beginning of the term.

Project Work on Home Farm

STATE AID

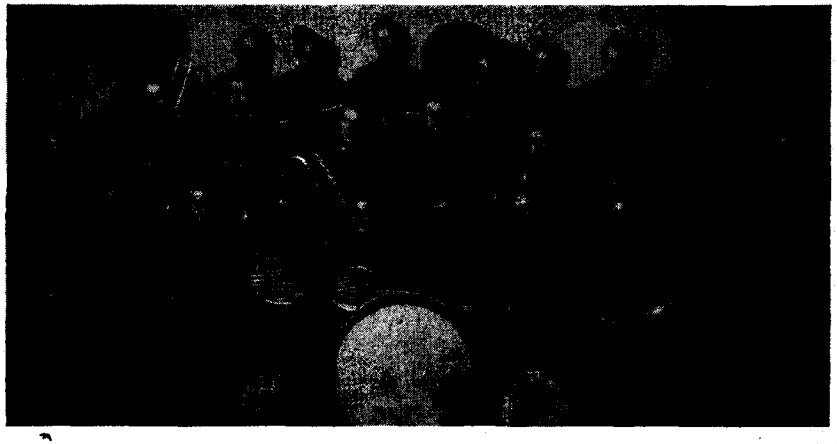
The state of Minnesota, believing in the value of the School of Agriculture, has made provision to pay the tuition, laboratory, and equipment fees for any farm boy or girl under twenty-one years who has completed the eighth grade, but who is not yet a high school graduate, and who comes from a school district which does not maintain an accredited high school within its own jurisdiction. A rate of $7 per month has been established to cover all the tuition, laboratory, and equipment fees (except deposits) of such students. This reduces the cost of attending to include only board, room, and laundry. Students must secure a tuition certificate from their county superintendent of schools in their home county and present it when registering at the School of Agriculture. For further information, write directly to Superintendent J. O. Christianson, School of Agriculture, University Farm, St. Paul 8.

ASSEMBLY

Another advantage School of Agriculture students have is the proximity to the outstanding centers of interest in the state here in the Twin Cities. The students become acquainted with the various leaders and institutions in all lines of activities through speakers at assembly and occasional tours. A wide range of topics, many of which relate to rural and agricultural problems, are discussed by outstanding men and women who speak to the students of the School of Agriculture at the assembly held four times a week at 12:10 p.m. These speakers include prominent state and national officials, business men, particularly those connected with the agricultural industries, professional men and women, prominent clergymen of all denominations, educators from other institutions, and successful farmers and homemakers.

HIGH SCHOOL GRADUATES

It is often difficult for the average person to realize that the University of Minnesota maintains and has maintained now for over fifty years a school of this kind, that is open to any farm boy or girl regardless of whether he or she has had high school training. During the past several years there has been an increase in the number of high school graduates, or former high school students, who have attended the School of Agriculture. More and more generally that high school graduate who does not intend to go through four years of college for a degree, but who



The School of Agriculture Band

wishes to supplement high school training by further specialization along the lines of his or her particular interest, comes to the School of Agriculture. There is flexibility and opportunity here for specialized programs and for following the lines of one's particular interest.

For those students who have had work in well-equipped high school agricultural departments, credit will be given for the elementary courses in the School of Agriculture. Such students can and do find many courses at the School of Agriculture with which to continue. Most high school graduates are able to finish the regular School of Agriculture course in two years of six months each year. High school courses equivalent to courses offered in the school will receive the same credit as those given in the school.

STUDENTS' HEALTH SERVICE

A health fee of $4 a term, included in the incidental fee, is paid by each student for the maintenance of the Students' Health Service. For this fee the student may receive medical examination and the professional services of the staff when needed. For services which are specialized and individual in character, such as operations, board and laundry when in the hospital, drugs, X rays, outpatient calls, dentistry, etc., special fees, calculated on a cost basis, are charged. No student, however, will be denied service because of inability to pay these fees.

The offices of the Health Service and the Students' Hospital and Dispensary on the Agricultural campus are located in the new Health

Service Building. The services of the hospital and dispensary are available at all hours of the day and night. Physicians of the Health Service will be in attendance daily.

A Class in Livestock Judging

SERVES TWO GROUPS

The School of Agriculture at University Farm, then, very definitely serves two groups—first, those students who have completed the eighth grade, and see the need for further education; second, those high school graduates who want to supplement their high school training by a year or two in getting the advantages of association with outstanding leaders and students in a great university school of agriculture. Then, too, the school serves those who have had only a year or two of high school and who do not plan to go back to high school for further education. They find the more practical work at the School of Agriculture; their interest is rekindled; and very often it is found that those students become outstanding as leaders in their communities and as good farmers and homemakers.

LEADERS IN AGRICULTURE

During the more than fifty-six years that the School of Agriculture has been in existence at University Farm, over 19,000 young men and young women have attended. In every county of the state of Minnesota among the outstanding leaders in various farm organizations and farm movements are former students and graduates of the School of Agriculture. At the School of Agriculture those students have had the opportunity of contact with men whose names are recognized in agriculture, not only in this state, but throughout the entire nation. The association with such leaders is a most vital and worth-while part of the educational program of the School of Agriculture. For education is not gained from

books and laboratories alone, but in the long run the most worth-while part of education is gained through association with great minds and with the leading young people of all of the communities as brought together here at this great farm school.

HOME LIFE ON THE CAMPUS

The life of the student while attending the School of Agriculture is subject to supervision. The home life of each student is carefully guarded, and everything is done to promote a healthful and moral atmosphere. The use of tobacco on the campus and the use of intoxicating liquors of any kind are strictly forbidden. No student will be allowed to have a car while attending the School of Agriculture. Anyone not in accord with these restrictions and not willing to lend a hand toward promoting a strong moral growth should not come to the School of Agriculture. It is the aim of the administration to be firm, reasonable, and sympathetic. A student who becomes antagonistic to the spirit of the school will be dismissed whenever the general welfare requires it. The school does not wish to undertake the problem of disciplining students who are not in sympathy with its purpose. A pamphlet containing the rules and regulations of the school will be furnished each student at the time of registration or upon application to the office of admissions and records.

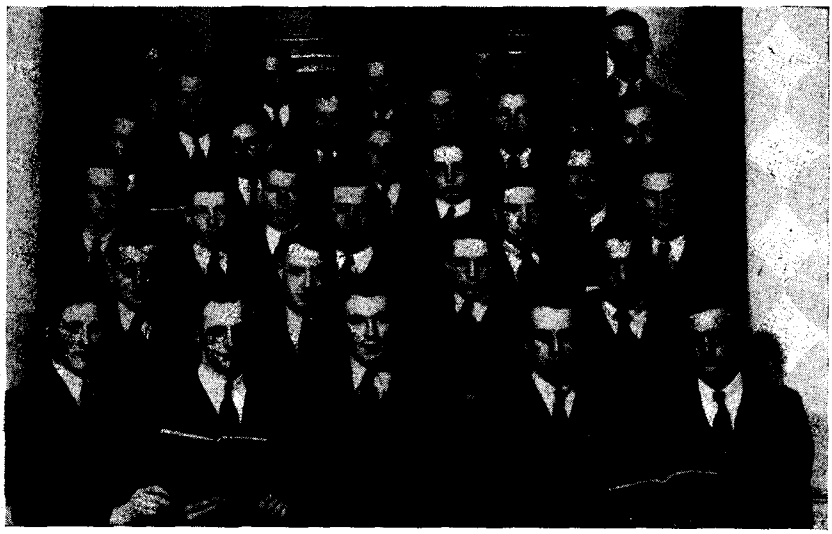
A Carpentry Class in Action

The students' social and dormitory life is supervised and directed by two women instructors of the school faculty, one in charge of the girls' dormitory and the other in charge of the boys' dormitories. Resident in each of the boys' dormitories is a young college man who acts as a counselor. All regulations governing the campus life of the student are subject to the approval of the dean of the Department of Agriculture and the superintendent of the School of Agriculture.

From 8:15 a.m. to 4:30 p.m. and also after 7:30 p.m. students not at classes or assembly are expected to be in their rooms or at the library studying or reading. The rooms shall at all times be quiet, especially in the evening, so that no student will be disturbed.

The buildings are all lighted by electricity and warmed by steam. The sleeping rooms are each furnished with a bedstead, mattress, dressing bureau, chairs, and a table. The student provides sheets, blankets or quilts, bedspread, pillow, pillowcases, and towels. Laundry is collected weekly and is returned a week later, which necessitates having a sufficient supply of clothing and bedding.

Each prospective student who desires to room in the dormitory is required to send in a deposit of $2, which will be returned in case the application is received after all dormitory rooms are assigned or in the event that the student cannot come. All money orders or checks should be made payable to the Department of Agriculture, University of Minnesota.



The Boys' Glee Club

EXTRACURRICULAR ACTIVITIES

Each Sunday morning at 8:30, throughout the school year, students of the School of Agriculture meet at a song service sponsored by the Y.M.C.A. and the Y.W.C.A. The Y.M.C.A. and the Y.W.C.A. are active voluntary organizations on the campus, the members having regular weekly meetings as well as sponsoring occasional get-togethers of all the students. Other opportunities for a student to participate in whatever line of activity he is interested in while attending the school are afforded by the International Relations Club for those who are interested in world affairs, the 4-H Club, Dairy and Livestock Club, Rural Theatre Players for those interested in dramatics, the Girls' Athletic Association, the extemporaneous speaking contest, debate teams, literary societies, student religious groups, both Protestant and Catholic.

Students who play instruments, or sing, have opportunities of being a part of musical groups such as the band, orchestra, vocal trios, quartets, glee clubs, and chorus. These groups often appear at assemblies during the year, as well as at meetings of other groups and organizations in the cities. Students are occasionally asked to appear on the School of Agriculture radio program, "The Friendly Road," which is presented over the University Station WLB on Mondays, Wednesdays, and Fridays at 1 p.m.

The *Agreview,* the school paper, is published monthly during the school year by a selected group of students under the supervision of a faculty adviser. It aims to give publicity of interest to students and alumni and to serve as a tie between the school and the alumni.

The *Agrarian* is a yearbook published by the senior class of the school. This book reviews and pictures the school activities of the year.

The Cross-Country Team

ATHLETICS

Interscholastic.—Competition in basketball, wrestling, and cross-country running provides an opportunity for the men students to try their skills in competition with other schools and organizations. Games and contests with other schools of agriculture are highlights of the interschool program. During the winter term the girls participate in basketball games with other school teams. Athletics are regarded as an important phase of the activities of the Department of Physical Education, the aim of the interscholastic athletic program being to realize through proper organization and administration as many of the educational opportunities of athletics as possible.

Instruction, team and individual practice periods under competent coaches will be held each afternoon between 3:30 and 5:30 p.m. at the gymnasium. Cross-country practice begins with the opening of school in the fall, and matches are held in the early part of the fall term. Basketball and wrestling team practice start in November with scheduled contests beginning in December and extending through the winter quarter.

The "A," one of the most highly prized awards, is given to those men and women who have achieved distinction in interscholastic athletics and have fulfilled the participation requirements during the season.

Intramural.—The intramural program provides for every student in the school the opportunity to enjoy and participate in athletics and recreational activities. Emphasis is placed on those sports which develop leisure time interests and habits. Intramural athletics provide a natural outgrowth of the required program of physical education.

A varied program of activities consisting of diamondball, touchball, football, field meet, horseshoes, table tennis, archery, swimming, basketball, volleyball, track and field meet, and boxing and wrestling tournaments is offered during the school year. An intramural committee, composed of a representative from each class, serves the director in an advisory capacity.

The Department of Physical Education and Athletics urges students to participate in the varied program and to use the facilities and equipment of the gymnasium. A large basketball court, running track, swimming pool, badminton and volleyball courts, archery range, handball and squash courts, separate boxing and wrestling rooms, golf driving net, social games room provide adequate indoor facilities, and the excellent recreational field adjoining the gymnasium offers opportunities to each student to take part in activities which are physically wholesome, mentally stimulating and satisfying, and socially sound.

Students Practicing Crops Judging

STUDENT AID

The School of Agriculture has maintained a helpful policy in furnishing employment for students and in providing loans. The prospective student who desires to make application for such work or loan in order to help meet his expenses while attending school should write directly to Superintendent J. O. Christianson, School of Agriculture, University Farm, St. Paul 8. Various organizations have maintained student scholarship and loan funds so that for any deserving young man or young woman from a farm in Minnesota who is really interested in attending the school, there is always a way of making that interest become an actuality. The Ludden Trust, the Minnesota Farm Bureau Loan Fund, and funds left by the classes of 1902, 1916, 1924, 1925, 1929, 1930, 1931, and 1932 are available for temporary loans to students who are worthy and who need such help in order to attend.

SCHOLARSHIPS

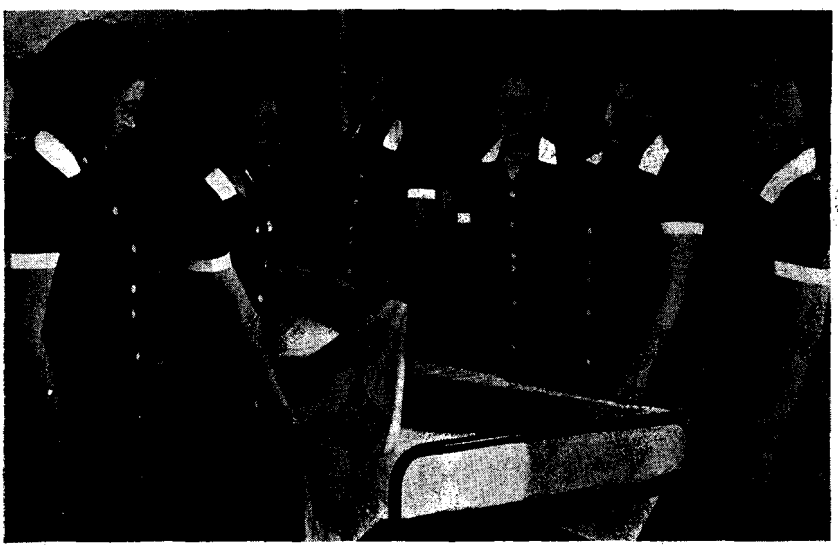
A fund willed by Caleb Dorr of Minneapolis furnishes cash prizes amounting to $90 each year, which are offered to students securing the highest standings in general scholarship. Of this amount $35 will be offered each term in five prizes of $10, $8, $7, $5, and $5. All students carrying the full work of 18 credit hours per term are eligible for these prizes. One prize of $15 will be awarded at the close of the second term for the senior student graduating from the School of Agriculture with the highest scholarship and student activity record for the first five terms.

The awards will be made (1) on class standings as recorded by instructors for the term's work, and (2) on student activities and deportment. The class standings will count for 90 per cent and the student activities for 10 per cent. In determining the grades of scholarship the merit point system adopted by the office of admissions and records will be used. The rating for student activities will be based on the quality of leadership as indicated by a review of the activities participated in and the general deportment of the student during attendance at school. This rating will be determined by the scholarship committee in consultation with the preceptresses and the superintendent of the School of Agriculture.

The annual income from a fund of $500, which was established in memory of Peter Gideon, the originator of the Wealthy apple, is divided into two prizes for the best home projects in horticulture.

Interest from the LeRoy Cady scholarship fund of $1,500, which was raised by popular subscription by the Minnesota Garden Flower Society, is used to aid deserving students who are pursuing courses in horticulture.

Sears, Roebuck and Company of Chicago, Illinois, have established a scholarship fund to aid worthy farm boys and girls attending the School of Agriculture who have maintained a satisfactory grade of scholarship and citizenship, who come from farm homes, and who intend to continue in agricultural work.



A Class in Practical Nursing

The Minnesota Livestock Breeders' Association has made available the interest from a fund which has accumulated in connection with the Junior Livestock Show in memory of William A. McKerrow. These McKerrow scholarships are awarded to worthy boys and girls who, in the light of their opportunities, have made commendable progress in livestock development and activities.

YEARS OF OPPORTUNITY

Any young man or young woman in a rural area who is interested in more training along the line of agriculture or homemaking and who plans and wants to be a good farmer and homemaker may write to J. O. Christianson, School of Agriculture, University Farm, St. Paul 8, for further information about this school. The golden years between fifteen and twenty come only once—they are the greatest years of opportunity that any person ever knows. The faculty of the School of Agriculture at University Farm wishes to be of service to the youth of this state in helping them to make the most of those years.

COURSES OF STUDY IN AGRICULTURE

Figures following the names of courses indicate the number of credit hours. One credit hour is equivalent to one class period devoted to recitation or lecture or to two such periods devoted to laboratory work.

For description of the courses listed in the following outline see pages 30 to 42, and for schedule of classes, see School of Agriculture Bulletin, Part II.

See pages 7 and 8 for statement with reference to home project work.

Courses which may be taken either term are indicated by (f,w), those which are offered in the fall term only are indicated by (f), and those offered only in the winter term by (w).

Every student in agriculture who plans to graduate is expected to select one of the following courses of study: (a) general farming, (b) farm mechanics, (c) horticulture, (d) livestock production, (e) crop production, or (f) rural builders.

Adults desiring special courses should consult the Curriculum Committee.

Special students of mature years who do not desire a diploma but who wish to take special work may, by action of the Curriculum Committee, be allowed to arrange a curriculum under the supervision of a faculty adviser.

The program for boys at the School of Agriculture is intended primarily for those who expect to return to the farm. With the increased complexity of operating a farm, with more mechanization and larger capital investments, successful management calls for a high degree of skill and knowledge through agricultural training such as provided through the School of Agriculture.

Some school graduates are occupying positions as *farm superintendents*. The demand for farm superintendents increases as farms are operated in larger units with hired help and more machinery.

Certain courses at the School of Agriculture will fit a man to become a *successful herdsman*. Livestock Production I, Dairy Stock Judging, Livestock Feeding and Management, Milk Production, and Veterinary Studies are helpful courses toward this end.

Young men who have had training at the School of Agriculture are especially fitted to go out as *testers for cow testing associations*. This is an excellent means of gaining valuable experience in dairy management.

Students who complete the regular course in the School of Agriculture and then take the Short Course for Creamery Operators at the University Farm are particularly well fitted to become *buttermakers and creamery operators*.

A young man who has skill in the use of tools may find remunerative employment as a *carpenter* in rural districts after he has finished his course at the School of Agriculture—especially if he has specialized in the Rural Builders Course including Carpentry, Farm Buildings, and Mechanical Drawing. Also, many who take the regular Mechanics Course find employment as *garage men*. Courses in Mechanical Training, Tractor and Gas Engines, Heat and Electricity, and Farm Electrical Equipment, provide a very fine training for this work.

A regular three-year course is planned for those desiring to take up *Landscape Gardening and Nursery Work*. The instruction is very practical. Many graduates have secured well-paid positions as *gardeners and caretakers of summer homes and golf courses*. Some of the most suc-

cessful nurseries in the state are owned and managed by graduates of the School of Agriculture.

Practically all counties in Minnesota are hiring properly prepared young men as *county 4-H Club leaders.* The School of Agriculture training, where students can obtain courses in Leaders and Leadership, Parliamentary Law, and Psychology, equips those who have natural leadership qualities for these county leadership jobs.

For those boys who wish to *continue their education* at college, working toward a degree, and who have not previously finished high school, the School of Agriculture, altho essentially a vocation school, provides the necessary prerequisites.

For a farm boy who has *completed high school and who plans to follow farming as his life work,* the School of Agriculture offers the opportunity of more specialized training along lines of particular interest and at the same time provides broad general training in group activities and leadership through all the facilities of a great university. No duplication of high school work is required. Credit will be given for such high school courses as correspond to any courses given at the school. High school graduates generally complete the regular three-year course in two years of six months each year.

GENERAL FARMING

FRESHMAN YEAR

Required—First Term	Required—Second Term
Orientation, 1(f,w)	English Classics, 3(f,w)
English I, 3(f,w)	Soils, 3(f,w)
Personal Health, 1(f,w)	Animal Biology, 3(f,w)
Farm Arithmetic, 3(f,w)	Chemistry in Agriculture, 3(f,w)†
Livestock Production, 3(f,w)	Physical Education, 1(f,w)
Mechanical Training, 3(f,w)	How to Study, 1(f,w)
Agricultural Botany, 3(f,w)	First Aid, 1(f,w)
Physical Education, 1(f,w)	Electives, 4*
Social Problems for Boys, 2(f,w)	
Electives, 1*	

JUNIOR YEAR

Required—First Term	Required—Second Term
Business English, 3(f,w) or Debating, 3(w)	English Composition, 3(f,w)
Forage Crops, 3(f,w)	Grain Crops, 3(f,w)
Farm Horticulture, 3(f,w)	Farm Dairying, 3(f,w)
Dairy Stock Feeding, 3(f,w)	General Poultry Management, 3(f,w)
Livestock Feeding, 3(f,w)	Physical Education, 1(f,w)
Physical Education, 1(f,w)	Electives, 6*
Electives, 3*	

SENIOR YEAR

Required—First Term	Required—Second Term
Public Speaking, 3(f,w)	English VI, 3(f,w)
National Government, 3(f,w)	State and Local Government, 3(f,w)
Livestock Breeding, 3(w)	Rural Sociology, 3(f,w)
Farm Management I, 3(f,w)	Farm Management II, 3(w)
Physical Education, 1(f,w)	Crop Breeding, 3(w)
Electives, 6*	Physical Education, 1(f,w)
	Electives, 3*

* For elective courses, see pages 28-29.

† Not equivalent to high school chemistry.

FARM MECHANICS

FRESHMAN YEAR

REQUIRED—FIRST TERM
English I, 3(f,w)
Orientation, 1(f,w)
Personal Health, 1(f,w)
Farm Arithmetic, 3(f,w)
Livestock Production, 3(f,w)
Gas Engines and Tractors, 3(f,w)
Agricultural Botany, 3(f,w)
Physical Education, 1(f,w)
Social Problems for Boys, 2(f,w)
Electives, 1*

REQUIRED—SECOND TERM
English Classics, 3(f,w)
Physics in Agriculture, 3(f,w)
Mechanical Training, 3(f,w)
Chemistry in Agriculture, 3(f,w)†
How to Study, 1(f,w)
First Aid, 1(f,w)
Physical Education, 1(f,w)
Electives, 4*

JUNIOR YEAR

REQUIRED—FIRST TERM
Business English, 3(f,w) or
Debating, 3(w)
Livestock Feeding, 3(f,w)
Farm Carpentry, 3(f,w)
Soils, 3(f,w)
National Government, 3(f)
Physical Education, 1(f,w)
Electives, 3*

REQUIRED—SECOND TERM
English Composition, 3(f,w)
Grain Crops, 3(f,w) or
Forage Crops, 3(f,w)
Farm Dairying, 3(f,w)
Farm Implements, 3(f,w)
Physical Education, 1(f,w)
Electives, 6*

SENIOR YEAR

REQUIRED—FIRST TERM
Public Speaking, 3(f,w)
Drawing and Farm Buildings, 3(f,w)
Rural Sociology, 3(f,w)
Farm Management I, 3(f,w)
Physical Education, 1(f,w)
Electives, 6*

REQUIRED—SECOND TERM
English VI, 3(f,w)
State and Local Government, 3(f,w)
Farm Management II, 3(w)
Farmstead Conveniences, 3(w)
Physical Education, 1(f,w)
Electives, 6*

HORTICULTURE

FRESHMAN YEAR

REQUIRED—FIRST TERM
Orientation, 1(f,w)
English I, 3(f,w)
Personal Health, 1(f,w)
Farm Arithmetic, 3(f,w)
Agricultural Botany, 3(f,w)
Chemistry in Agriculture, 3(f,w)†
Social Problems for Boys, 2(f,w)
Physical Education, 1(f,w)
Electives, 4*

REQUIRED—SECOND TERM
English Classics, 3(f,w)
Soils, 3(f,w)
Mechanical Training, 3(f,w)
Physical Education, 1(f,w)
How to Study, 1(f,w)
First Aid, 1(f,w)
Plant Propagation, 3(w)
Electives, 4*

JUNIOR YEAR

REQUIRED—FIRST TERM
Business English, 3(f,w) or
Debating, 3(w)
Vegetable Gardening, 3(f)
Landscape Gardening I, 2(f)
Physical Education, 1(f,w)
Electives, 10*

REQUIRED—SECOND TERM
English Composition, 3(f,w)
Physical Education, 1(f,w)
Animal Biology, 3(f,w)
Electives, 12*

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* For elective courses, see pages 28-29.
† Not equivalent to high school chemistry.

SENIOR YEAR

Required—First Term	Required—Second Term
Public Speaking, 3(f,w)	English VI, 3(f,w)
National Government, 3(f,w)	State and Local Government, 3(f,w)
Plant Diseases, 3(f)	Rural Sociology, 3(f,w)
Insect Pests of Plants, 3(f)	Bookkeeping I, 3(f,w)
Physical Education, 1(f,w)	Small Fruit Growing, 3(w)
Electives, 6*	Physical Education, 1(f,w)
	Electives, 3*

Optional Courses§

Floriculture, 3(f)
Greenhouse Management, 3(w)
Landscape Gardening II, 2(w)
Orchard Fruit Growing, 3(f)
Potato Production, 3(w)
Special Problems in Horticulture, variable credit, (f,w)
Seed Testing, 2(w)
Farm Forestry, 3(w)

LIVESTOCK PRODUCTION

FRESHMAN YEAR

Required—First Term	Required—Second Term
Orientation, 1(f,w)	English Classics, 3(f,w)
English I, 3(f,w)	Soils, 3(f,w)
Personal Health, 1(f,w)	Animal Biology, 3(f,w)
Farm Arithmetic, 3(f,w)	Chemistry in Agriculture, 3(f,w)†
Livestock Production, 3(f,w)	Physical Education, 1(f,w)
Mechanical Training, 3(f,w)	How to Study, 1(f,w)
Agricultural Botany, 3(f,w)	First Aid, 1(f,w)
Physical Education, 1(f,w)	Electives, 4*
Social Problems for Boys, 2(f,w)	
Electives, 1*	

JUNIOR YEAR

Required—First Term	Required—Second Term
Business English, 3(f,w) or Debating, 3(w)	English Composition, 3(f,w)
Forage Crops, 3(f,w)	Veterinary Studies, 3(f,w)
Livestock Feeding, 3(f,w)	Farm Dairying, 3(f,w)
Dairy Stock Feeding, 3(f,w)	Physical Education, 1(f,w)
Physical Education, 1(f,w)	Electives, 9*
Electives, 6*	

SENIOR YEAR

Required—First Term	Required—Second Term
Public Speaking, 3(f,w)	English VI, 3(f,w)
Rural Sociology, 3(f,w)	State and Local Government, 3(f,w)
National Government, 3(f,w)	Livestock Breeding, 3(w)
Farm Management I, 3(f,w)	Farm Management II, 3(w)
Physical Education, 1(f,w)	Physical Education, 1(f,w)
Management and Care of Livestock, 3(f)	Electives, 6*
Electives, 3*	

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* For elective courses, see pages 28-29.

† Not equivalent to high school chemistry.

§ Four courses must be selected from this group to fulfill graduation requirements in Horticulture Course.

CROP PRODUCTION

FRESHMAN YEAR

REQUIRED—FIRST TERM
Orientation, 1(f,w)
English I, 3(f,w)
Personal Health, 1(f,w)
Farm Arithmetic, 3(f,w)
Social Problems for Boys, 2(f,w)
Mechanical Training, 3(f,w)
Agricultural Botany, 3(f,w)
Soils, 3(f,w)
Physical Education, 1(f,w)
Electives, 1*

REQUIRED—SECOND TERM
English Classics, 3(f,w)
Chemistry in Agriculture, 3(f,w)†
Grain Crops, 3(f,w)
Forage Crops, 3(f,w)
Livestock Production, 3(f,w)
Physical Education, 1(f,w)
How to Study, 1(f,w)
First Aid, 1(f,w)
Electives, 1*

JUNIOR YEAR

REQUIRED—FIRST TERM
Business English, 3(f,w) or
Debating, 3(w)
Livestock Feeding, 3(f,w)
Genetics and Eugenics, 3(f)
Farm Horticulture, 3(f,w)
Farm Management I, 3(f,w)
Physical Education, 1(f,w)
Electives, 4*

REQUIRED—SECOND TERM
English Composition, 3(f,w)
Seed Testing, 2(w)
Potato Production, 3(w)
Weeds, 2(w)
Physical Education, 1(f,w)
Electives, 8*

SENIOR YEAR

REQUIRED—FIRST TERM
Public Speaking, 3(f,w)
National Government, 3(f,w)
Rural Sociology, 3(f,w)
Plant Diseases, 3(f)
Insect Pests of Plants, 3(f)
Physical Education, 1(f,w)
Electives, 3*

REQUIRED—SECOND TERM
English VI, 3(f,w)
State and Local Government, 3(f,w)
Crop Breeding, 3(w)
Farm Management II, 3(w)
Dairy Stock Feeding, 3(f,w)
Physical Education, 1(f,w)
Electives, 3*

RURAL BUILDERS COURSE

The course for rural builders is designed to provide a practical training for young men with a farm background, so they may serve in this important field. The course provides not only a thoro training in framing and construction of buildings, commonly known as carpentry work, but also provides training in all phases of rural building planning. Young men who complete this course should be able to help the farmer with all details of the planning of his buildings and to act in the capacity of the contractor and builder.

The man with such training may be employed by a lumber dealer who sells a variety of building materials, or he may operate independently as contractor and builder in his community.

Permission to continue the course after the first year will depend on the aptitude of the student and the quality of his work.

FRESHMAN YEAR

REQUIRED—FIRST TERM
English I, 3(f,w)
Orientation, 1(f,w)
Personal Health, 1(f,w)
Farm Arithmetic, 3(f,w)
Mechanical Training, 3(f,w)
Farm Carpentry, 3(f,w)
Physics in Agriculture, 3(f,w)
Social Problems for Boys, 2(f,w)
Physical Education, 1(f,w)
Electives, 1*

REQUIRED—SECOND TERM
English Classics, 3(f,w)
Milk Production, 3(w)
Advanced Farm Arithmetic, 3(f,w)
Building Construction I, 3(w)
How to Study, 1(f,w)
First Aid, 1(f,w)
Physical Education, 1(f,w)
Electives, 4*

* For elective courses, see pages 28-29.
† Not equivalent to high school chemistry.

JUNIOR YEAR

Required—First Term	Required—Second Term
Business English, 3(f,w)	English Composition, 3(f,w)
Livestock Production, 3(f,w)	Commercial Law, 3(f,w)
General Poultry Management, 3(f,w)	Advanced Drawing, 3(w)
Drawing and Farm Buildings, 3(f,w)	Farmstead Conveniences, 3(w)
Building Construction II, 3(f)	Masonry Construction, 3(w)
Physical Education, 1(f,w)	Physical Education, 1(f,w)
Electives, 3*	Electives, 3*

SENIOR YEAR

Required—First Term	Required—Second Term
Public Speaking, 3(f,w)	English VI, 3(f,w)
Bookkeeping I, 3(f,w)	Economics, 3(w)
State and Local Government, 3(f,w)	Building Construction III, 3(w)
Gas Engines and Tractors, 3(f,w)	Building Materials, Specifications, and Estimating, 3(w)
Farmhouse Planning and Remodeling, 3(f)	Rural Sociology, 3(f,w)
Physical Education, 1(f,w)	Physical Education, 1(f,w)
Electives, 3*	Electives, 3*

COURSES OF STUDY IN HOME ECONOMICS AND HOME NURSING

HOME ECONOMICS

The primary purpose of the *Home Economics Course* is to train young women to become efficient homemakers, but in addition, it is possible for them to elect work along several different lines in preparation for wage earning. Many girls go out as home nursing aids, doing practical home nursing in their home communities. Those who intend to enter training to become professional nurses receive an advantageous background of related course work at the school. Some girls qualify for positions as nursemaids or governesses.

Girls may elect business courses and prepare to become clerks, stenographers, or bookkeepers. This general training fits them particularly well for work in county agent offices or other similar offices, as well as for bookkeeping or clerical work in village or country stores.

Several school graduates are employed as county 4-H Club leaders. The training at the school equips those who have natural leadership qualities for these positions.

Positions as home managers are often taken by girls who have had School of Agriculture training.

Courses in music give, to those who have special ability along that line, an opportunity to learn to conduct community singing and orchestras and to give elementary instruction in music. Each girl makes her program under the direction of one of the members of the Home Economics faculty.

* For elective courses, see pages 28-29.

FRESHMAN YEAR

REQUIRED—FIRST TERM	REQUIRED—SECOND TERM
Orientation, 1(f,w)	Related Science II, 3(w)
Related Science I, 3(f)	English Classics, 3(f,w)
English I, 3(f,w)	Meal Planning and Preparation, 3(w)
Selection and Preparation of Food, 3(f)	First Aid, 1(f,w)
Related Art, 3(f)	Physical Education, 1(f,w)
Personal Health, 1(f,w)	How to Study, 1(f,w)
Physical Education, 1(f,w)	Electives, 8*
Clothing Planning and Construction, 3(f)	
Social Training, 2(f,w)	
Electives, 3*	

JUNIOR YEAR

REQUIRED—FIRST TERM	REQUIRED—SECOND TERM
Business English, 3(f,w) or	English Composition, 3(f,w)
Debating, 3(w)	Animal Biology, 3(f,w)
Foods and Nutrition, 3(f)	Child Development, 3(f,w)
Textiles and Dressmaking, 3(f,w)	Home Nursing, 5(w)
House Planning and Furnishing, 3(f,w)	Physical Education, 1(f,w)
American History, 3(f)	Electives, 4*
Physical Education, 1(f,w)	
Electives, 3*	

SENIOR YEAR

REQUIRED—FIRST TERM	REQUIRED—SECOND TERM
Public Speaking, 3(f,w)	English VI, 3(f,w)
National Government, 3(f,w)	State and Local Government, 3(f,w)
Household Buying, 3(f)	The Girl's Wardrobe, 3(w)
Physical Education, 1(f,w)	Home Management, 3(w)
Rural Sociology, 3(f,w)	Physical Education, 1(f,w)
Electives, 6*	Electives, 6*

HOME MANAGEMENT AND PRACTICAL NURSING

In the course in *Home Management and Practical Nursing* the students receive training which enables them to care for persons with illnesses which are not serious enough to require the services of a graduate nurse—and also to manage the home itself. There is great need of persons with such training in the rural communities. Graduates of this course are accepted for registry with the Physicians Exchange in St. Paul as practical nurses. In the rural communities girls with this training are very much in demand. For those who do not intend to work as *practical nurses,* this training is ideal for their own homes—a training that every homemaker should have. The following are the primary objectives of the course:

Objectives of the course from the nursing standpoint:

Understand first aid methods and home safety precaution.

Learn how to care for a person having minor illnesses and injuries that may occur in the home.

Understand the relationship of the home nurse to the doctor, the supervisory nurse, the patient, and the family.

Gain a working knowledge of the needs for sanitation in the home and community.

Obtain practical experience in dealing with cases of illness in the home.

Know and observe desirable physical and mental health practices.

* For elective courses, see pages 28-29.

Learn something of the sciences upon which the nursing and medical professions are based.
Understand current preventive medicine procedures.

Objectives from the home management standpoint:

Understand the problems involved in running a home where there is illness and develop judgment in organization and management of the work.
Gain experience in planning, preparing, and serving attractive and nutritious meals to both sick and well family members.
Learn how to properly care for, control, and direct the children in the family.
Be able to make a home attractive and livable.
Know methods for proper care of home furnishings and equipment.
Develop ability to do sewing and know how to give clothing satisfactory care.
Keep morale of patient, family, and self at a high level.

In addition to the training objectives noted above, there is also the related line of employment as office attendants for doctors if the business course given at the school is combined with this course in Home Management and Practical Nursing.

To enroll for this course in Home Management and Practical Nursing a girl must be at least seventeen years of age and of such personality and disposition as is necessary in caring for the sick. Each person must present application before enrolment—application blanks may be secured from the office of the superintendent of the School of Agriculture, University Farm, St. Paul 8, Minnesota.

FRESHMAN YEAR

REQUIRED—FIRST TERM	REQUIRED—SECOND TERM
Orientation, 1(f,w)	English Classics, 3(f,w)
English I, 3(f,w)	Physiology, 3(w)
Selection and Preparation of Food, 3(f)	Chemistry in Agriculture, 3(f,w)†
Related Art, 3(f)	First Aid, 1(f,w)
Personal Health, 1(f,w)	Home Nursing, 5(w)
Social Training, 2(f,w)	How to Study, 1(f,w)
American History, 3(f)	Physical Education, 1(f,w)
Related Science I, 3(f)	Electives, 2*
Physical Education, 1(f,w)	
Electives, 1*	

JUNIOR YEAR

REQUIRED—FIRST TERM	REQUIRED—SECOND TERM
Business English, 3(f,w) or Debating, 3(w)	English Composition, 3(f,w)
Psychology, 3(f)	Elements of Bacteriology, 3(w)
Special Home Problems, 3(f)	Rural Sanitation, 3(w)
Clothing Planning and Construction, 3(f)	Meal Planning and Preparation, 3(w)
Animal Biology, 3(f,w)	Home Nursing, 5(w)
Physical Education, 1(f,w)	Physical Education, 1(f,w)
Electives, 3*	Electives, 1*

* For elective courses, see pages 28-29.
† Not equivalent to high school chemistry.

SENIOR YEAR

REQUIRED—FIRST TERM

Public Speaking, 3(f,w)
Household Buying, 3(f)
Foods and Nutrition, 3(f)
Child Care and Development, 3(f,w)
Physical Education, 1(f,w)
Electives, 6*

REQUIRED—SECOND TERM

English VI, 3(f,w)
State and Local Government, 3(f,w) or
National Government, 3(f,w) or
History of Civilization, 3(w)
Rural Sociology, 3(f,w)
Field Work in Home Nursing, 3(w)
Physical Education, 1(f,w)
Electives, 6*

ELECTIVES

Open to All

FRESHMAN YEAR

Animal Biology, 3(f,w)
Chemistry in Agriculture, 3(f,w)
Elementary Beekeeping I, 3(f)
Elementary Beekeeping II, 3(w)
Farm Horticulture, 3(f,w)
Plant Propagation, 3(w)
Floriculture, 3(f)
Landscape Gardening I, 2(f)
Landscape Gardening II, 2(w)
Agricultural Botany, 3(f,w)
General Poultry Management, 3(f,w)
Poultry Judging and Marketing, 3(f,w)
Incubation, Brooding, and Breeding, 3(w)
Turkey Production, 2(w)
Advanced Farm Arithmetic, 3(f,w)
Algebra I, 7(f)†
Algebra II, 7(w)†
Geometry I, 7(f)†
Geometry II, 7(w)†
Elements of Music, 2(f,w)
Harmony I, 2(f,w)
Chorus, 1(f,w)
Violin, 1(f,w)
Piano, 1(f,w)
Instrumental Music, 1(f,w)
Orchestra, 2(f,w)
Voice, 1(f,w)
Harmony II, 2(w)
Harmony III, 2(f,w)
Choral Class, 2(f,w)
Appreciation of Music, 3(f,w)
Band, 2(f,w)
Acting I, 2(f,w)
Acting II, 2(f,w)
Play Production, 2(f,w)
Sight Singing and Conducting, 1(f,w)
Spelling, 1(f,w)
Penmanship, 1(f,w)
Typewriting I, 3(f,w)
Typewriting II, 3(f,w)
Stenography I, 3(f,w)
Stenography II, 3(f,w)
Stenography III, 3(f,w)
Bookkeeping I, 3(f,w)
Bookkeeping II, 3(f,w)
Commercial Law, 3(f,w)
Physiology, 3(w)
Rural Sanitation, 3(w)
Soils, 3(f,w)

JUNIOR YEAR

Chemistry of Plant and Animal Life I, 3(f)
Chemistry of Plant and Animal Life II, 3(w)
Genetics and Eugenics, 3(f)
Farm Dairying, 3(f,w)
Utilization of Meats, 3(w)
Advanced Beekeeping, 3(f,w)
Insect Pests of Plants, 3(f)
Orchard Fruit Growing, 3(f)
Small Fruit Growing, 3(w)
Business English, 3(f)
Books and Reading, 3(f,w)
Special Problems in Horticulture, (w)
Special Problems in Entomology, (f,w)
Debating, 3(w)
Plant Diseases, 3(f)
Parliamentary Law, 2(f,w)
Marketing, 3(f,w)
American History, 3(f,w)
History of Civilization, 3(w)
Farm Finance, 3(w)
Typewriting III, 3(f,w)
Typewriting IV, 3(f,w)
Stenography IV, 3(f,w)
Stenography V, 3(f,w)
Office Practice, 3(f,w)
Elements of Bacteriology, 3(w)

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* For elective courses, see below.
† Credit does not count toward graduation.

SENIOR YEAR

Advanced Public Speaking, 3(w)
English Literature I, 5(f)
English Literature II, 5(w)
Economics, 3(w)
Leaders and Leadership, 3(w)
Psychology, 3(f,w)
National Government, 3(f,w)

Open to Agriculture Students Only

FRESHMAN YEAR

Gas Engines and Tractors, 3(f,w)
Mechanical Training, 3(f,w)
Metal Working, 3(f,w)
Livestock Production, 3(f,w)
Farm Carpentry, 3(f,w)
Physics in Agriculture, 3(f,w)
Building Construction I, 3(w)
Livestock Judging, 1(w)
Livestock Feeding, 3(f,w)
Management and Care of Livestock, 3(f)
Home Problems for Boys, 2(w)
Soils, 3(f,w)
Grain Crops, 3(f,w)
Forage Crops, 3(f,w)
Masonry Construction, 3(w)

JUNIOR YEAR

Farm Implements, 3(f,w)
Farm Butchering and Curing of Meats, 3(w)
Dairy Stock Feeding, 3(f,w)
Crop Breeding, 3(w)
Crop Judging, 1(w)
Building Construction II, 3(f)
Advanced Drawing, 3(w)
Farm Forestry, 3(w)
Dairy Stock Judging, 2(w)
Vegetable Gardening, 3(f)
Greenhouse Management, 3(w)
Potato Production, 3(w)
Seed Testing, 2(w)
Weeds, 2(f)
Veterinary Studies, 3(f,w)
Dairy Testing, 1(w)
Farmstead Conveniences, 3(w)

SENIOR YEAR

Farm Management I, 3(f,w)
Farm Management II, 3(w)
Livestock Breeding, 3(w)
Milk Production, 3(w)
Advanced Dairy Stock Feeding, 3(w)
Dairy Stock Selection, 3(w)
Building Construction III, 3(w)
Drawing and Farm Buildings, 3(f,w)
Farm House Planning and Remodeling, 3(f)
Building Materials, Specifications, and Estimating, 3(w)

Open to Home Economics Students Only

FRESHMAN YEAR

Home Economics Units, (w)
3 units of 1 cred. each
Home Crafts, 3(f)
Home Planning and Furnishing, 3(f,w)
Related Science II, 3(w)
Special Home Problems, 3(f)
Home Service, 3(w)
Farm Arithmetic, 3(f,w)

JUNIOR YEAR

Home Economics Projects, 1-3(f,w)
Textiles and Dressmaking, 3(f,w)
Conservation of Home Furnishings, 2(w)
Millinary Construction and Remodeling, 2(f)
Food Problems, 3(f)

SENIOR YEAR

The Girl's Wardrobe, 3(w)
Home Management, 3(w)
Field Work in Home Nursing, 3(w)

ADMISSION TO THE COLLEGE OF AGRICULTURE, FORESTRY, AND HOME ECONOMICS

Graduates of the School of Agriculture of the University of Minnesota who have completed the two summers of supervised farm work offered in the school course, one additional school year, and one additional summer's work, or the equivalent thereof, will be admitted to the College of Agriculture, Forestry, and Home Economics. This applies to those who have not completed a four-year high school course.

DESCRIPTION OF COURSES

AGRICULTURAL BIOCHEMISTRY

A1-2. Chemistry of Plant and Animal Life I, II. The fundamental principles of chemistry necessary for an understanding of common daily phenomena. The scope of agricultural chemistry and the help which the farmer may expect from the chemical laboratories of the state are outlined. (Equivalent of high school chemistry.)

A4. Chemistry in Agriculture. A survey discussion—lecture course indicating the important part that chemistry plays in agriculture and modern civilization. (Not the equivalent of high school chemistry.)

AGRICULTURAL ECONOMICS

A21. Farm Management I (Farm Records and Accounts). Forms and procedure for recording inventories, cash receipts and expenses, crop acreages and yields, feed for livestock, farm produce used in the house, and other information concerning the farm business. Calculation of measures of earnings and of management efficiency. Practice in recording and analyzing a year's business for a Minnesota farm.

A22. Farm Management II (Organization). Farm organization as related to types of farming, combinations of enterprises, crop rotation, soil management, fields and farmstead arrangement, and the efficient use of labor and equipment.

AGRICULTURAL ENGINEERING

A10. Farm Implements. Selection, operation, and care of farm machinery, also the cost, depreciation, and adaptability of the various machines to the work to be accomplished.

A11. Gas Engines and Tractors. Theory and practice work in gasoline Diesel engines and tractors.

A15. Masonry Construction. Study of concrete including selection of aggregate, mixing, placing, reinforcing, and curing. The laying-up of brick, tile and concrete blocks with mortar joints.

A16. Mechanical Training. General. Instruction and laboratory practice in rope splicing, knots, belt lacing, pulleys and shafting, soldering, electric wiring, leather sewing and riveting.

A17. Metal Working. Instruction and laboratory practice in pipe fitting, valves, cold metal work, oxyacetylene welding, brazing, cutting, and electric arc welding.

A18. Physics in Agriculture. The mechanics of solids, liquids, and gases. Special emphasis on farm applications.

A19. Farmstead Conveniences. Principles of heating, lighting, sanitation and water supply.

A22. Farm Carpentry. Instruction and practice in the use of woodworking tools and machines, and the construction, repair and maintenance of lumber-built farmstead equipment. Practice in tool sharpening. saw filing, glazing and painting.

A23. Building Construction I. Instruction and practice in the framing of farm buildings. Floor, wall, and roof construction.

A24. Building Construction II. The application of exterior coverings and trim to the walls and roofs of farm buildings. The framing of porches, dormers, and gambrel and gothic roofs.

A25. Building Construction III. The installation of interior finish and builders hardware. Ventilating systems and insulating materials. The application of paint and wood preservative to buildings and equipment.

A32. Drawing and Farm Buildings. Preparation and interpretation of working drawings. Planning, details of construction, and maintenance of farm buildings.

A33. Advanced Drawing. Information and practice in the making and reading of building and equipment plans. Sources of plans and methods of altering them to meet specific requirements.

A34. Farm House Planning and Remodeling. The arrangement and design of houses for convenience, economy, and comfort.

A35. Building Materials, Specifications, and Estimating. A study of the cost, qualities, and quantities of materials used in farm structures, and the labor required to put them in place.

AGRONOMY AND PLANT GENETICS

A1. Grain Crops. The history, culture, and uses of the important grain crops and corn.

A2. Forage Crops. The identification, culture, harvesting methods, storage, value for feed and market, and uses for soil conservation of the important forage grasses and legumes.

A3. Genetics and Eugenics. The laws of heredity with plants, animals, and human beings, inheritance of important characters in man, including physical abnormalities, mental deficiencies, intelligence, etc., and the relation of these principles to problems of race improvement.

A4. Crop Judging. Identification of farm crops, weeds, and plant diseases from plant and seed specimens, varietal identification, practice in judging wheat, oats, barley, flax, alfalfa, and sweet clover.

A5. Crop Breeding. Modern methods of breeding and propagating the various farm and horticultural crops with plans for growing and certifying pedigreed seed.

ANIMAL AND POULTRY HUSBANDRY

ANIMAL HUSBANDRY

A3. Livestock Production. The products and adaptations of farm animals; specialized livestock production enterprises; characteristics and adaptations of the pure breeds; the market classes and grades of farm animals; practice in judging livestock.

A4. Farm Butchering and Curing of Meats. Lectures, demonstrations, and practice in slaughtering and dressing animals and in cutting and curing meats.

A5. Livestock Breeding. Livestock improvement and variation, heredity, environment, and selection as factors therein; line breeding, inbreeding, crossbreeding, and grading up; the purebred sire; pedigree registration; practical breeders' problems.

A6. Livestock Judging. Practice in judging horses, cattle, sheep, and hogs from the market and breeding standpoint.

A7. Utilization of Meats. Lectures on methods of utilizing cuts from the beef, pork, and lamb carcass; curing and storing meats for summer use; laboratory practice in preparing cuts of meat for cooking; sausage making, and lard rendering. (This course is intended primarily for women students altho it is also open to men students.)

A9. Livestock Feeding. The important principles involved in the selection and preparation of feeds; methods of feeding beef cattle, swine, sheep, and horses.

A10. Management and Care of Livestock. Planning the livestock enterprise, the business side of livestock production, buying and selling animals, housing, care and sanitary measures.

POULTRY HUSBANDRY

A11. General Poultry Management. The poultry industry, its magnitude, advantages and disadvantages, seasonable market classes and breeds best adapted to egg production and to different markets, nutrition, feeds, feeding, winter egg production, houses and appliances, yards, prevention of disease.

A12. Poultry Judging and Marketing. Lectures and laboratory practice in judging for standard requirements and selecting for production qualities; grading live and dressed poultry, candling and grading eggs for market.

A13. Incubation, Brooding, and Breeding. Instruction in the principles and practice of incubation; feeding and management of growing chicks; breeding for flock improvement.

A14. Turkey Production. Instruction in breeds, breeding, incubation, brooding and rearing, feeding and marketing of turkeys. Possible and probable profits, merits of different varieties, shelters for old and young, hatching, brooding, and marketing.

DAIRY HUSBANDRY

A1. Dairy Stock Feeding. The principles of feeding. A study of feedstuffs, and formulation of rations for dairy animals.

A2. Farm Dairying. Development of the dairy industry, breeds of dairy cattle, composition and properties of milk and milk products, dairy farm sanitation, care and operation of dairy farm equipment.

A3. Dairy Stock Judging. Practice in judging dairy cattle both from the standpoint of the farmer who is interested in the production of dairy products for market and the breeder of purebred cattle.

A5. Milk Production. A study of the problems in dairy herd management, raising of calves and young stock, and factors influencing the cost of producing milk.

A6. Advanced Dairy Stock Feeding. An advanced course dealing with rations and special feeding problems.

A7. Dairy Stock Selection. Characteristics of the dairy breeds, selection of breeding stock, valuation of pedigrees, and selection of sires.

A8. Dairy Testing. Laboratory practice in use of the Babcock test and other simple tests for milk and milk products.

ENTOMOLOGY AND ECONOMIC ZOOLOGY

A1. Animal Biology. Fundamental principles of animal life such as metabolism, respiration, digestion, growth, and reproduction. The more important groups of the animal kingdom and their relation to man.

A4. Elementary Beekeeping I. Fundamentals of bee behavior and of beekeeping practice during spring and early summer; spring management. Swarming, swarm control, and increase.

A5. Elementary Beekeeping II. Fundamentals of bee behavior and of beekeeping practice during late summer, fall, and winter. Production of extracted honey, comb honey, and wax. Feeding, requeening. Wintering of bees. Bee diseases.

A6. Advanced Beekeeping. Commercial and out-apiaries. Migratory beekeeping. Package bees and nuclei. Home queen rearing. Marketing of honey.

A16. Insect Pests of Plants. Life cycles of insect pests injurious to cultivated plants and methods of combating them.

A18. Special Problems. Properly qualified students will be given opportunity to carry on individual work in biology, economic entomology, and beekeeping. In each case permission of the instructor must be obtained in advance.

FORESTRY

A1. Farm Forestry. Planting and care of farm windbreaks, shelterbelts, and woodlots. Seed collecting, storage, and germination problems. Preservative treatments for farm timbers and fence posts. Raising coniferous and deciduous seedlings.

HOME ECONOMICS

A2. Clothing Planning and Construction. A study of the student's clothing needs for the improvement of personal appearance. The care and repair of clothing, cleaning, laundering, and study of cotton clothing. The construction of a cotton garment.

A4. Textiles and Dressmaking. The selection of suitable fabrics and designs for clothing. The construction of dresses or other garments for school and home use. Renovation of garments.

A5. The Girl's Wardrobe. The application of design, textile, and economic information to the problems of assembling a wardrobe. The planning and construction of garments suited to the student's needs.

A6. Conservation of Home Furnishings. A course planned to meet the needs of the present emergency. Provides opportunity for discussion, demonstration and laboratory experience on care and repair of furniture, rugs, walls, curtains, draperies; on ways of using materials already on hand to make attractive and usable furnishings and accessories; on refinishing, reupholstering or slip covering furniture.

A7. Millinery Construction and Remodeling. Design, care, and renovation of hats, hat materials, and trimmings. Construction of different types of hats.

A21. Related Art. The principles of design and color harmony applied to suitable clothing; furnishings and arrangement of rooms; craft problems.

A26. House Planning and Furnishing. A consideration of the house in relation to the needs of the family. Consideration will be given to location, exterior design, convenient arrangement of floor space; selection of interior finish, wall and floor coverings, furniture, curtains, and pictures; furniture refinishing.

A27. Home Economics Units. Unit I: The study of unusual dishes which add variety to meals, including preparation and marketing; Unit II: Foods used in other countries; Unit III: Desserts for various meals and foods for sale.

A28. Home Crafts. The principles of design and color harmony are applied to articles made of wood, metal, paper, etc. Shop experiences are provided in the repair, maintenance, and refinishing of furniture and other household equipment.

A31. Selection and Preparation of Food. A study of food in relation to planning, preparation, and serving of luncheons and suppers. The care and upkeep of kitchen and dining room equipment. Methods of food preservation.

A32. Meal Planning and Preparation. Advanced food study in relation to the preparation and serving of dinners. Food combinations, marketing, and plans for family meals. Opportunity for small groups to prepare and serve meals.

A33. Foods and Nutrition. A study of the food needs for optimum health of individuals and families. Food for different individuals, infants, children, and the sick.

A34. Home Management. Analysis of the problems of the homemaker as manager. Selection and use of techniques for utilizing material and human resources. Planning for home hospitality.

A35. Child Care and Development. A study of the factors influencing the proper growth (mental and physical) of the small child, a discussion of the best literature and toys for children's use. Direct experience with observation of children in their own homes is provided.

A36. Home Service. A study of the accepted forms of table service with emphasis on the duties of a waitress. Opportunities for experience in serving meals and giving parties.

A37. Household Buying. A study of the availability, the market, the price, the basis for selection, and the methods of purchase of commodities in common use by the average person or family.

A39. Food Problems. A study of desirable standards for preserved and baked foods for home use and for salable products. Development of skill in their preparation.

A40. Home Economics Projects. Students may select a project in the home economics field with guidance, carry on independent work, report to the teacher at intervals, and make a final report. Credit will be granted according to the quality of the completed project.

A50. Related Science I. A study of the interesting phenomena of everyday life, especially those relating to the home. Work with household materials such as furniture and metal polishes, soaps, etc.

A51. Related Science II. A study of certain science principles and applications that relate to foods, textiles and clothing, water, electricity, lighting, and simple machines found in the home.

A53. Special Home Problems. A study of the care and management of the home under conditions of illness or other emergencies.

A73. Home Problems for Boys. The study of the selection of food; fundamental processes of cooking; adequate food for the family; financial management; selection and care of clothing; family and community relationships. This course is planned for young men.

HORTICULTURE

A1. Farm Horticulture. Principles of landscape planning, cellar and frozen storage of fruits and vegetables. Growing fruits and vegetables for use on the farm. Location and planting of the orchard and garden, and culture of the important crops.

A2. Orchard Fruit Growing. Commercial orcharding with special consideration of the profitable management of an orchard on the Minnesota farm. Location; planting; selection of varieties; cultural systems; pruning; pest control; harvesting and marketing of fruit.

A3. Vegetable Gardening. Growing of vegetable crops for market. Locating, planting, and care of the commercial garden; consideration of the important crops; marketing methods; types of glass structures, their uses, and the production of vegetables under glass.

A4. Small Fruit Growing. A practical study of berry growing as a commercial enterprise in Minnesota and the Northwest, covering the establishing and managing of plantations of strawberries, raspberries, gooseberries, currants, and grapes.

A5. Plant Propagation. Methods of propagation of plants by seeds, cuttings, layers, grafting, and budding are studied. The principles of greenhouse management, transplanting, watering, and ventilation are studied.

A7. Floriculture. A working knowledge of the culture and use of house plants, annuals, and perennials.

A8. Landscape Gardening I. Most of the term will be devoted to a study of the trees and shrubs used in landscape planting. In the latter part of the term some attention will be given to the principles of landscape gardening.

A9. Landscape Gardening II. Practice and principles of ornamental plantings as applied to the home and community, with special reference to the small place and the farmstead.

A10. Greenhouse Management. Management of the greenhouse from the standpoint of the fruit, vegetable, or flower grower. Various crops in relation to types of glass construction. Practice work in crops in the greenhouse.

A14. Potato Production. Growth, climatic requirements, regional distribution, standardization of varieties according to soil, climate, and markets. Identification, exhibiting, judging, handling of seed plots, certification, cultural methods, storage, and marketing.

A15. Special Problems in Horticulture. Individual instruction in the various phases of horticulture adjusted to meet the needs of the student. Credit may be earned in one or more quarters.

PHYSICAL EDUCATION AND ATHLETICS

MEN

The Department of Physical Education and Athletics attempts to present to the student a well-rounded program embracing required physical education, interschool athletics, and intramural activities to provide for growth and development of the physical, psychological, social, and recreational abilities of each individual. A primary objective is the development of interests, abilities, attitudes, and appreciations for physical activities.

Intramural or interclass athletics are organized and established to provide the opportunity and enjoyment of participation in athletic activities for every student of the school. Student recreation and health is the purpose of the varied intramural program offering activity in softball, touchball, football field meet, horseshoe, table tennis, archery, swimming, basketball, volleyball, track and field meet, boxing and wrestling tournaments, ice skating, and social dancing.

Interscholastic competition with other schools of agriculture and colleges in basketball, cross-country running, swimming, and wrestling is an important part of the school program each term.

The various phases of the physical education and athletic program provide an opportunity for the development and maintenance of physical fitness through participation in a broad sports program of vigorous activities and conditioning exercises that build strength, stamina, endurance, motor co-ordination and provide skills for the satisfaction of leisure time recreational interests and needs.

The required physical education course activities consist of the following:

A1. Physical Education Activities. Development of skills and sports fundamentals; a comprehensive knowledge of rules, techniques, and strategies; body control, team play and co-operation; and the health habits and safety factors associated with these various physical activities. Fall term—softball, touchball, speedball, volleyball, tumbling, swimming; winter term—basketball, track, boxing, wrestling, volleyball, handball, marching, social games, tumbling and pyramids, ice skating, hockey, and skiing.

A2. Beginning Swimming. For non-swimmers and those unable to swim in deep water. Health and safety factors in the pool; developing confidence in the water; elementary strokes; artificial respiration.

A3. Boxing. Stance and positions; leading, simple, and combination blows; defensive and offensive tactics; ring strategy; scientific aspects of the sport and presentation as a means of exercise and development.

A4. Social Games and Recreational Sports. Instruction in active and social games, and home play. Rural recreation suggestions. An advanced course dealing with more intensive play and knowledge of badminton, handball, table tennis, shuffleboard, golf driving, horseshoes, archery, dart baseball, desk tennis, aerial tennis.

A5. Sports Administration. Leadership, initiative factors in sports; development of play and recreation facilities; principles of physical education; practice in administration and organization of various athletic events; history of sports; rural recreation organizations.

A6. Advanced Swimming. Instruction for those individuals able to swim in deep water. Technique of basic swimming strokes, development of endurance and stamina for distance swimming, methods of water rescue and diving.

WOMEN

This department offers a program of health and physical education planned to meet the needs of the students and to achieve the desirable outcomes of an activity program. A selected number of group, individual, and dual sports are offered to enable students to acquire skill and knowledge in the field of recreational activities. Students are encouraged to take work in folk dancing, gymnastics, rhythmic activities, and body building exercises to develop ease of movement, co-ordination, grace, and self-confidence. The importance of correct posture is stressed in all teaching, and special help in posture correction is given individually. Definite hours are arranged for the activities in the Girls' Athletic Association. These activities are: basketball, volleyball, archery, swimming, badminton, skating, shuffleboard, and baseball. Through this program an opportunity is afforded to the students for making friends and developing better social qualities.

A1. Team Games. An opportunity for experience in team games of field ball, softball, and volleyball (fall quarter); and basketball, hit pin baseball, and volleyball (winter quarter). Discussion of rules and techniques of various skills of each sport.

A2. Recreational Games. Instruction in archery, shuffleboard, deck tennis, badminton, and table tennis.

A3. Rhythmical Activities. Instruction in tap and folk dancing and singing games.

A4. Beginning Swimming. This is a course for those who do not know how to swim or are not at home in deep water. Instruction will be given in elementary strokes, diving, and water emergency measures.

A5. Lifesaving and Water Front Safety. Instruction in junior and senior lifesaving tests and methods of water rescue which have been set up by the American Red Cross. Techniques and methods of teaching swimming at beach or camp, including instruction in organization and program-planning for all age levels.

A6. Recreational Leadership. Instruction in organizing, conducting, and planning a program of recreational activities for various age levels. Knowledge of team games, individual sports, social games, and mixers, presented with the idea of developing teaching ability and leadership.

A7. Intermediate and Advanced Swimming. Instruction in basic swimming strokes, correction of self-taught swimming activities to more efficient movements, water emergency measures, diving and water safety.

PLANT PATHOLOGY AND BOTANY

A1. Agricultural Botany. The structure and life processes of economic plants and their relation to agricultural practices. Growth, absorption, food manufacture, reproduction, and respiration. The dependence of man and animals on green plants. The nature of fungi and bacteria, and their importance in causing disease and decay.

A2. Seed Testing. The seeds of the common farm weeds, with special attention to those of noxious weeds. A set of seed cases is made and practice is given in testing seeds for purity and germination.

A11. Plant Diseases. Important diseases of fruit, vegetable, and field crops in Minnesota, with emphasis on the nature of the cause and methods of control.

A12. Weeds. Farm weeds with special emphasis on their identification, control, and eradication.

PUBLIC HEALTH

A1. Personal Health. Methods of promotion of health and prevention of disease; fundamentals of healthful living; individual and community activities against the spread of disease.

A2. First Aid. Emergency care of accidents and injuries. Lectures and demonstrations.

A4. Rural Sanitation. Disposal of excreta, sewage, and other waste; location, construction, and operation of rural water supplies; sanitary production, handling, processing, and serving of food; control of animals and insects involved in the spread of disease; ventilation and air conditioning; farm and home safety.

A6. Home Nursing. The place of the home nurse in the family and the community. Further discussion and demonstration of underlying principles and procedures used by the home nurse. Laboratory sessions for practice.

RHETORIC

A1. English I. Themes, outlining, use of the dictionary and the library. English usage.

A2. English Classics. Types of literature. Evaluation of books and periodicals.

A3. Business English. Practice in various forms of correspondence and business forms. English usage.

A4. English Composition. Themes of narration, description, and exposition.

A5. Public Speaking. Principles and practice in the composition and delivery of speeches.

A6. English VI. Exposition and argument. Gathering and outlining material.

A14. Advanced Public Speaking. A continuation of Course A5. Selecting and organizing material for speeches and the presentation of speeches effectively before a given audience.

A21-22. English Literature I, II. The history of English literature, with a study of selections. For students planning to enter the College of Agriculture, Forestry, and Home Economics.

A23. Books and Reading. Interpretation of recent literature. The home library.

A32. Debating. Gathering of evidence. Reasoning. Briefing. Debate.

SCHOOL (GENERAL)

A1. Farm Arithmetic. Training in simple mathematical processes, applications of principles to problems requiring measurements of material, extension, capacity. Practical applications to farm and home life. Assists in the mathematics of the technical school courses.

A2. Advanced Farm Arithmetic. Similar in outline to Course A1. Special emphasis on farming as a business.

A4. Algebra I. Fundamental operations; properties of algebraic numbers, addition, subtraction, multiplication, division, factoring, simple equations, fractions.

A5. Algebra II. Fractional equations, literal numbers, proportions, simultaneous equations, radical, quadratics. Emphasis upon the development and use of formulae. Problems taken from fields allied to agriculture.

A6. Geometry I. Parallel and perpendicular lines, triangles, loci, polygons, proportion, similar polygons. Theorems developed both inductively and deductively. In this term's work, emphasis is placed upon geometry as a reasoning process.

A7. Geometry II. Inequalities, circles, numerical relations, areas, regular polygons. Special emphasis on those problems relating to farm life such as the calculation of areas, surveying, and problems taken from mechanics.

A12. Acting I. Training in the fundamentals of speech. The physical mechanisms of voice production, voice control, interpretative reading, control of the body, and complete acting scenes.

A13. Acting II. Advanced training in all the phases of acting. Reading the play, approach to the part, responsibilities of the actor, characterization, motivation, and polishing the part. Each member to participate in a one-act play given before an audience as part of the class work. Also helpful information and practice in costuming and make-up.

A14. Play Production. The director's approach to producing the play in the rural community. Choosing the play, planning the action, choosing the cast, rehearsal procedure, developing characterization, coordinating the play, the final week, and production of the play. Also the technical aspects of producing a rural play. Planning the setting, lighting, costumes, properties, scene construction, and make-up. Actual laboratory work in all these technical phases done on the regular plays of the season.

A15. Sight-Singing and Conducting. Basic course for students of instrumental or vocal music. Training in sight-reading and technique of conducting with emphasis on preparing students for leadership in the musical groups of their own communities.

A21. Elements of Music. Improvement of general musicianship. Fundamental principles of musical notation, pitch, rhythm, musical terms, formation of major scales, musical forms, and acoustics. Preparation for the study of harmony.

A22. Harmony I. Chord construction. Aural and visual recognition of chords. Dissonance and consonance. Four-part writing. Study of melody and its harmonization.

A23. Chorus. Accompanied and unaccompanied choral music of graded difficulty. Trios, quartets, etc., will be developed from among students of ability as shown through voice tests. Several public appearances and radio performances of the chorus work will be given.

A24. Violin. Elementary: Hoffman, *Kayser Etudes, Schradieck Scales, Solos in Comparison.* Intermediate: scales in all positions, Seveik, Mazas, Dont, compositions of medium difficulty. Advanced: Kreutzer, Fiorillo, Rode, Gavinie, sonatas of Handel, Gade, David, concertos of Viotti, DeBeriot, Mendelssohn. Ten thirty-minute lessons, $6.55 per term.

A25.* Piano. Elementary and advanced technical training, scales, arpeggios, octaves, chords, selected technical studies. Bach: *Inventions, Well-Tempered Clavichord.* Sonatinas: Clementi, Kuhlan; sonatas: Haydn, Mozart, Beethoven. Solos for all grades; classics and best modern material. Ten thirty-minute lessons, $6.55 per term.

A26. Instrumental Music. Band and orchestral instruments, such as cornet, clarinet, saxophone, trombone, baritone, alto, horn, tuba, etc., using standard textbook containing latest methods. Ten thirty-minute lessons, $6.55 per term.

A27. Orchestra. Standard works in orchestral music. Special attention is given to interpretation, rhythm, phrasing, intonation, and sight reading.

A28. Voice. Fundamentals of voice production; i.e., breath control, freedom of articulating muscles, resonance, pure vowel sounds, diction, projection of voice. Vocal studies, exercises and songs to meet individual requirements. Ten thirty-minute lessons, $6.55 per term.

A29. Harmony II. Formation and progression of triads, seventh and ninth chords. Harmonizing given bass. Harmonic analysis and creative writing.

A31. Choral Class. Also called SAUM Singers. Students showing special aptitude and interest in choral music are given an opportunity for more advanced instruction and participation in a very active musical life while at school. It is intended to perform each year at least one opera or a comparably large vocal work with talent drawn largely from this group.

A32. Appreciation of Music. Brief history; biographies of well-known composers; and a knowledge of standard musical literature for the orchestra, band, chorus, solo work, and any combination or group of instruments or voices.

A34. Band. Ensemble playing, sight reading, breathing, scales, intonation, phrasing, rhythm, and practical band experience is given. Best standard musical literature. Advanced methods in nonpressure tone production and attack. Three hours a week individual practice.

* Piano students may register for orchestra and receive training through piano quartet (two pianos), subject to the approval of the instructor.

A40. Leaders and Leadership. Study of types of leaders, origins, social stimuli, personality, character, inhibitions, tact, system, and organization. An analysis of leaders, applied to rural activities and organizations.

A41. Parliamentary Law. Principles of parliamentary law, how to organize a society, duties of officers, how to record proceedings, and how to conduct meetings. Students will be given practice under the direction of the instructor.

A43. Economics. Fundamental laws governing production, consumption, distribution, and exchange. Principles of economics as applied to the farmer's relationships, as a producer and as a consumer. A discussion of wages, rent, and interest.

A44. Marketing. Elementary principles to be considered in organizing a local co-operative. Types of marketing organizations both local and terminal. The marketing of perishables, semi-perishables, and staple commodities. A discussion of pooling and hedging.

A46. Rural Sociology. A practical course including a study of rural conditions, how to make a survey, the causes of present conditions and how they may be improved. Study of rural organizations, religions, and educational institutions.

A47. American History. Causes and effects of great movements are emphasized. History of the westward migration, immigration, foreign relations, and special emphasis on our history since 1900.

A48. History of Civilization. A survey of the social, political, and economic backgrounds of the ancient and medieval civilizations, contributions of their science, art, literature, laws, institutions, and thought to the present.

A49. Farm Finance. Money and its use as a medium of exchange. Monometallism and bimetallism. Systems of credit and banking operations. A discussion of the agricultural credit system, the federal farm land banks, federal intermediate credit banks, Federal Reserve System.

A53. National Government. National governmental machinery, functions, and finance, adding to the routine treatment some consideration of the modern tendencies and agencies of national control, regulation, and ownership.

A54. State and Local Government. The state, county, town, and school district in their present-day aspects as social and economic agents of the people of Minnesota; state and local finance, considering the sources, uses, collection.

A55. Social Training. Fundamental principles governing the individual in social contacts; attention to the rights and the responsibilities of the individual in institutional life; the home as the social center; discussion of problems arising in current social activities.

A56. Social Problems for Boys. An open forum for the discussion of social conventions of home, school, and public life.

A61. Spelling. Students poor in spelling should elect this course and continue until able to spell words in ordinary conversation and correspondence. A spelling text is used and drills on lists of commonly misspelled words are given.

A62. Penmanship. A standard muscular movement system is taught. Students who are poor in penmanship should elect this course.

A92. Psychology. A study of human activity and behavior as influenced by the reactions which the individual makes to his environment. A study of adjustments to new situations and development of personality.

A94. How To Study. Training in inventorying of study habits, in budgeting of time and planning a schedule, in effective reading, in technique of concentration, in taking notes, and in preparing for examinations.

BUSINESS COURSES

The object of these courses is to prepare students for office work on the farm, in the village, and in regular business offices.

The subject matter of these courses, combined with the courses in homemaking and agriculture, gives the students a training which qualifies them especially well to take positions as office assistants in farm bureaus, co-operative creameries, and local elevators and other farm organizations.

A80. Typewriting I. The touch method of typewriting is taught. Following the memorization and fingering of the keyboard, drills for acceleration, concentration, and rhythm are given.

A81. Typewriting II. A continuation of carefully planned drills for the development of accuracy and speed. Work in tabulating, letter writing, and practice on different makes of typewriters, with their care.

A82. Typewriting III. Business correspondence from the typist's viewpoint. Business letters and documents which help in gaining correct first impressions are studied and copied. Construction work requireing judgment in arrangement, and the exercising of initiative in solving original problems. Drills for the development of speed and accuracy are stressed.

A83. Stenography I. Beginning material of *The Gregg Shorthand Manual* and co-ordinating articles in Alice Hunter's *Graded Readings* are studied. Suitable elementary material is dictated to the class.

A84. Stenography II. Class continues the study of *The Gregg Shorthand Manual* and Alice Hunter's *Graded Readings*. Drills and dictation given in class.

A85. Stenography III. The study of *The Gregg Shorthand Manual* and Alice Hunter's *Graded Readings* continued. Supplementary material is studied. Dictation of suitable material in class for the development of skill in the taking and reading of shorthand notes.

A86. Bookkeeping I. Principles of double entry illustrated by keeping a set of books for a firm, making out the forms necessary for the various transactions, and closing the books.

A87. Bookkeeping II. Takes up the partnership form of business organization and continues accounting principles. An advanced set of books is kept.

A88. Commercial Law. Elementary principles governing contracts, a discussion of insurance, wills, deeds, mortgages, stocks, and bonds. Reference made to types of business organizations such as partnerships and corporations. Safe investments and the proper use of credit. Use of negotiable instruments.

A89. Typewriting IV. Course concentrates on the development of accuracy and speed in typing. Letters dictated to machine. Instructions given on the cutting of mimeograph stencils.

A90. Stenography IV. Completion of *The Gregg Shorthand Manual*. Study of much correlated supplementary material. Dictation and transcription work.

A91. Stenography V. Study of *Speed Studies* and advanced shorthand material. Much dictation of material at increasing rates of speed to develop shorthand skill. Accuracy of transcribing from shorthand notes emphasized.

A93. Office Practice. Actual office methods and practice as well as apprentice work in various offices on the Agricultural campus, and use of office appliances, such as dictaphone, mimeograph machine, and comptometer.

A95. Orientation. The first part of the term is devoted to the history, traditions, and organization of the School of Agriculture and the entire University of Minnesota. The balance of the work covers a survey of vocational opportunities on the basis of the school training.

A96. Field Work in Home Nursing. From 80 to 100 hours of work in homes caring for the sick under supervision of graduate nurse. This course is arranged for each student through the school office.

SOILS

A1. Soils. Minnesota soils, their formation, properties, and characteristics. Soil organisms and organic matter; the relation of water to soils and plants. Farm manures, green manures, and commercial fertilizers. Treatment of lime deficient, alkali, and peat soils. Erosion and erosion control practices. Lecture demonstrations and examination of soils with discussion of practical soil problems.

VETERINARY MEDICINE

A1. Physiology. The purpose of the course is to give an intelligent conception of the various organs and systems of the body; how they function and how they are managed for continued health and efficiency.

A4. Elements of Bacteriology. Lectures and demonstrations of the fundamental principles underlying the science of bacteriology, with special reference to organisms which cause disease. The use of vaccines, bacterines, antitoxins, immune sera.

A7. Veterinary Studies. The animal body in health and disease; causes, prevention, and management of disease including common parasitic diseases.

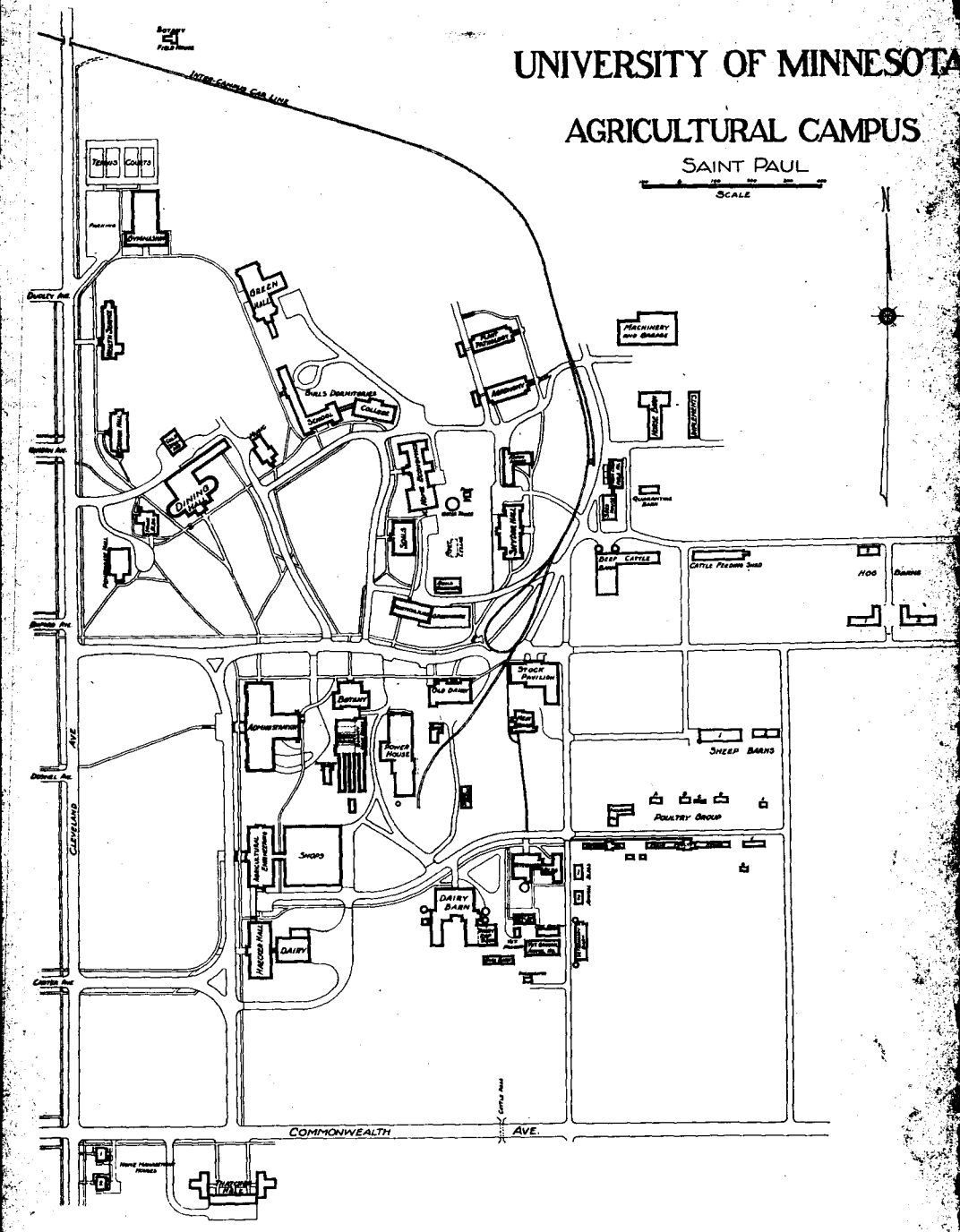
An Aggie Student

THE SCHOOL OF AGRICULTURE AT UNIVERSITY FARM

If you plan to enter the School, write to Superintendent J. O. Christianson, University Farm, St. Paul 8, and ask for an admission blank. Please do NOT send DIPLOMAS. In case you have had any high school work, be sure to have those credits recorded on the blank or send certificates covering the work done.

A $2 room reservation fee, made payable to the University Department of Agriculture, will reserve a room in the dormitories for you. This fee should accompany your application blank.

If you have any questions at all, write directly to Superintendent J. O. Christianson, University Farm, St. Paul 8.


UNIVERSITY OF MINNESOTA
AGRICULTURAL CAMPUS
SAINT PAUL
SCALE
INTER-CAMPUS CAR LINE
TENNIS COURTS
GYMNASIUM
GREEN HALL
SHELL DORMITORIES
SCHOOL OF AGRICULTURE
COLLEGE
DINING HALL
HORT. GREENHOUSES
ANIMAL HUSBANDRY
MACHINERY AND GARAGE
HORSE BARN
QUARANTINE BARN
DEEP CATTLE BARN
CATTLE FEEDING SHED
HOG BARNS
SHEEP BARNS
POULTRY GROUP
STOCK PAVILION
OLD DAIRY
ADMINISTRATION
POWER HOUSE
SHOPS
AGRICULTURAL CHEMISTRY
HAECKER HALL
DAIRY
DAIRY BARN
COMMONWEALTH AVE.
CLEVELAND AVE.
CASTLE ROAD
HOME MANAGEMENT HOUSES
FARMERS' HALL