

The Bulletin of the
UNIVERSITY of MINNESOTA

West Central School and Station
Morris, Minnesota
Announcement for the Years 1944-1946



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SCHOOL CALENDAR

1944-45

1944

October	2	Monday	First term opens—Registration new students
October	3	Tuesday	Registration former students—classes begin
November	11	Saturday	Armistice Day; a holiday
November	30	Thursday	Thanksgiving Day; a holiday
December	22	Friday	First term closes

1945

January	2	Tuesday	Second term opens—Registration
January	3	Wednesday	Organization of classes
February	12	Monday	Lincoln's Birthday; a holiday
February	22	Thursday	Washington's Birthday; a holiday
March	18	Sunday	Baccalaureate Services
March	23	Friday	Commencement Exercises Second term closes

1945-46 Calendar—To be announced

FACULTY

Walter C. Coffey, M.S., LL.D., President of the University
Clyde H. Bailey, Ph.D., Dean and Director of the Department of Agriculture

AT MORRIS

ADMINISTRATION

Theodore H. Fenske, M.S., Superintendent
Edwin J. Volden, Registrar
Hazel Winter, Secretary and Assistant Registrar
Arlette M. Soderberg, B.A., Librarian
Ethel S. Gustafson, B.S., Director of Home Economics
Nanna Jelstrup, B.A., Dean of Women
Astrid Holmes, R.N., School Nurse*
_____, School Nurse
Bernice Johnson, Accountant
Margaret Alm, Secretary

AGRICULTURAL ENGINEERING

Julius Felt, Carpentry, Farm Structures
Albert C. Heine, Physics, Farm Mechanics, and Electricity
Alex B. Rolfe, Forge, Welding, and Automotive Engineering
Albert Anderson, Forge
Herbert G. Croom, B.S., Farm Mechanics*
Palmer H. Goulson, B.S., Farm Mechanics

AGRONOMY AND HORTICULTURE

Allen W. Edson, M.S., Horticulture
Roy O. Bridgford, M.S., Farm Crops and Soils

ANIMAL HUSBANDRY

Clarence J. Hemming, M.S., Poultry
Philip S. Jordan, B.S. in Agr., Animal and Dairy Husbandry

AGRICULTURAL ECONOMICS

Allen W. Edson, M.S., Farm Management and Marketing
Clarence J. Hemming, M.S., Farm Accounts

HOME ECONOMICS

_____, Applied Arts and Home Furnishing
Ethel Gustafson, B.S., Foods
Fern B. Johnson, B.S., Home Management and Child Training
Bernice I. Oas, B.S., Clothing
_____, Nursing

ASSOCIATED SUBJECTS

Berenice E. Anderson, B.S., Business Training
Nanna Jelstrup, B.A., English and Mathematics
Theodore S. Long, M.A., English and Public Speaking
_____, English and Music
Alice Bayer, B.A., Music
Arlette M. Soderberg, B.A., English and Physical Training
Agnes Hovde, B.A., History and English
Helen Swan, Piano
Edwin J. Volden, Accounting
Herbert G. Croom, B.S., Home Project Supervisor*

* Military leave of absence.

GENERAL INFORMATION

PURPOSE

The West Central School of Agriculture was organized in 1910 as a division of the Department of Agriculture of the University of Minnesota. It was established primarily for the training of young men and young women for the vocations of farming and homemaking. It is a secondary school accepting students directly from the eighth grade, and offers extensive opportunities to that large group of young people who desire intensive vocational training and who are limited as to the time they can give to the completion of their education. The work is planned and the subjects are taught with the purpose of making the students efficient in their chosen vocations. The courses are sufficiently extended to give a fairly complete technical knowledge of the vocations of farming and homemaking, and a working basis for the economic and sociological aspects of farm life. The technical courses are amply supplemented by cultural subjects designed to give the students a broad and liberal outlook and the necessary preparation for useful citizenship.



View of the Campus from the Air

LOCATION

The school is admirably situated to serve that large section of the state in which it is located. A network of improved state highways connects the city of Morris with all parts of the district. The school itself adjoins the city of Morris and is situated on a natural rise of ground overlooking the Pomme de Terre Valley. The campus, with its thirty-one buildings, attractive lawns, and pleasant drives, is one of the beauty spots in this section.

ADMISSION

The school will admit any young man or young woman of good moral character who is fourteen years of age or older who has completed the eighth grade, and who desires vocational training in agriculture, home economics, and business. In special cases those who have not completed eighth grade work will be admitted provided they are at least

sixteen years of age. High school courses equivalent to courses offered in the School of Agriculture will receive the same credit as those offered in the school. High school graduates may register for any of the courses offered, and by properly planning their program, may become graduates of the School of Agriculture in much less time than the three years required for the regular student. Many high school graduates come for one year of specialized vocational training. Students should correspond with the registrar, before coming to the school, and make the necessary preliminary arrangements for registration.

TIME OF OPENING

The fall term of the West Central School of Agriculture will open the first Monday in October and close the Friday before Christmas. The winter term will open the first Tuesday in January and close the fourth Friday in March. The school work covers a period of six months, at a time when the student can best be spared from home.

THREE-YEAR COURSE

The regular courses cover a period of three sessions of six months each, from October through March. The course for young men is so arranged as to make it possible for the student to select a portion of the work in any of the following groups: agronomy, horticulture, animal husbandry, farm management, economics, or agricultural engineering. The course for young women provides special training in home management, clothing construction, foods, music, home nursing, public speaking, and business training. Both young men and young women may elect courses and receive credit in music in connection with any of the regular courses. They may also, in the third and fourth years, elect academic subjects, preparatory to college entrance. The main emphasis of the institution is given to the regular courses and all students are urged to complete the three-year course.

ADVANCED COURSES

It has been found that many students desire an advanced year after completing the regular three-year course. To meet this demand a fourth session of six months of work is offered. During this advanced year, graduates of the three-year course may elect to specialize in one of the lines of work listed below. They may at the same time choose from the elective lists subjects that they could not obtain during their first three sessions. The major lines of work suggested for boys are dairying, livestock production, farm engineering, economics, and academic subjects. The major lines for girls are home training, nursing, music, business training, and academic subjects.

COLLEGE PREPARATORY

Graduates of the three-year course at the West Central School of Agriculture who have completed two summers of supervised work on their home farms, one additional school year of six months, and one additional summer's work or the equivalent thereof, will be admitted to the University of Minnesota, and to the state teachers colleges.

COURSES FOR HIGH SCHOOL GRADUATES

High school graduates who are interested in securing further training on a non-college vocational basis are at liberty to select from any of the many courses offered. Students may specialize in agriculture, mechanical training, business training, or home economics. For a list of courses specially suited to high school graduates see pages 18-19. Some students may desire to earn a School of Agriculture diploma. This can be done in two years of six months each. Such students must complete certain required work listed on pages 14 through 19. Those not interested in a diploma may attend for one or more years and choose courses which fit their needs.

DEPARTMENT OF MUSIC

For students desiring special courses in music, credit courses in both vocal and instrumental music are offered. Prospective students should refer to the description of the music courses on page 27.

HOME PROJECT WORK

The purpose of this work is to promote and extend the technical work given in the classrooms and laboratories during the regular school sessions. The approved methods of home economics and agricultural practice are applied to some branch of the home or farm enterprise which the project is intended to cover. Reports are required throughout the season and the work is, at all times, in charge of supervisors who make the necessary visits to each student.

A description of all projects is given on pages 29-32.

ROOMS IN DORMITORIES

Old or new students planning to attend the West Central School of Agriculture should write early to the registrar, asking him to reserve a room in one of the dormitories. Students should reserve rooms in advance. Each dormitory room is furnished with two single beds, mattresses and pillows, a dresser, table, and chairs. Preference as to roommates should be stated early, and will be considered as far as possible.

WHAT TO BRING

Each student should bring with him one comforter and two blankets, towels, comb, brushes, one tumbler, one teaspoon, bedroom slippers, and at least two nightgowns or pajama suits. Students will also bring four single-bed-size sheets, two pillow cases, and a bedspread for a single bed. Sheets and pillow cases should be plainly marked with student's name, marking to be done with nonwashable ink, or by embroidering the name.

Each girl should bring with her, in addition to the items mentioned above, a bathrobe or housecoat, an apron, and a laundry bag. The bathrobe or housecoat may be of any style and material, the laundry bag should be of washable material large enough to hold the soiled clothes of one person. The bedroom slippers should have soft soles. All students will need tennis or gymnasium shoes and gymnasium suits.

TUITION FEES

The Minnesota legislature during the 1935 session amended the State School Aid Law, making it possible for eligible students to attend the schools of agriculture without the payment of tuition fees. The fees of such students are paid from State School Aid funds. These students will be required to pay only board and room.

All residents of Minnesota are eligible for tuition exemption who are eighth grade graduates and have not graduated from high school; who are under 21 years of age; and who do not reside in accredited high school districts.

A student who is eligible for tuition exemption must secure a tuition certificate from the county superintendent of the county in which the student graduated from the eighth grade. This certificate must be presented at the time of registration.

Students who do not qualify for tuition exemption are those who have not completed the eighth grade or who are high school graduates; who are 21 years of age or older; who reside in accredited high school districts; or who reside outside of the state of Minnesota.

Students not eligible for fee exemption will pay the following fixed fees as well as fees charged for various courses where laboratory material is used. The amount of these fees will be found in the description of the courses, pages 20-29.

Fees and first month's board and room are payable at the time of registration.

	Per term (3 months)
Registration	\$3.00
Gymnasium	1.00
Health Service	3.00
Book rent	1.50
Post office20
Privilege	2.50

Students who are not eligible for fee exemption may elect to pay \$21 per term to cover all the tuition, laboratory, and equipment fees (except deposit) rather than pay the individual fees listed above and the special fees charged for various courses.

BOARD AND ROOM

The cost of board will be \$17 per school month and for room \$5 per school month. No increases will be made unless living costs make the same necessary.

Chapter 523 of the 1941 Session Laws of the State of Minnesota provides funds to reimburse school districts for the transportation or board of nonresident high school pupils and students attending the state schools of agriculture, such transportation or board to be at rates, and under rules and regulations to be determined by the State Board of Education. See your county superintendent or local school board for further information about this.

Board and room are payable the first of each month in advance. No accounts can be carried. If students are compelled to be absent from school, the following regulations will govern refunds. No refunds are given for week-end absences. Room rent refunds are not made for any period of less than one month. Board refunds are made to the extent of one-half credit for the first two-week period and full credit for any additional time, provided the student notifies the dining hall manager before leaving. All students not residents of Morris are required to live in the dormitories and to board in the school dining hall, unless special arrangements are made with the superintendent. Such arrangements should be made prior to registration for classes.

On entering the school each student should bring sufficient money to pay for one month's board and room and to pay his fees, if required. This will amount to from \$27 to \$48.

BREAKAGE DEPOSIT

All students are required to make a breakage deposit of \$5 at the time of registration and this must be maintained at all times. Students who break laboratory equipment or damage school property are charged for necessary repairs or replacement and such charges are deducted from the breakage deposits. Miscellaneous damage to dormitories and other school buildings, which cannot be charged to individual students, must be charged collectively to the breakage deposits of all students occupying the building. The unused balance of the breakage deposit is returned to the students about three weeks after the close of the second term. No refunds, either from breakage fees or credit account balances, are made to students who have an unpaid student loan. In such cases balances are credited toward payment of the loan.

HEALTH SERVICE

The health fee is used to maintain the Students' Health Service. A special health service building is maintained and a full-time nurse is engaged during the school year. The health fee also provides for daily calls at the Health Service Building by a doctor at a specified hour, and his services are available to all students at that time. It does not provide for extra nurses or for physicians' calls in case of serious sickness, where

such are necessary, nor does it provide for extra costs caused by epidemics. These must be paid for by the student receiving the service. The Health Service is not equipped to take care of serious illness and cannot accept responsibility for such cases.

REGISTRATION

No student will be allowed to register for less than 23 credit hours of work, except by special permission of the chairman of the Scholarship and Standards Committee.

All fees must be paid at the time of registration.

No student will be allowed to register after the second week of the term, except by special permission.

CANCELLATION OF REGISTRATION

Students may cancel out of a course without a penalty of failure during the first two weeks of the school term. If a student cancels without faculty recommendation after the first two weeks, his record in that subject will be entered as a failure. Subjects may be added only during the first week of the term.

All changes in registration must be made on the proper form which the student will obtain from the chairman of the Scholarship and Standards Committee or his designated representative. All changes in registration must be approved by the Scholarship and Standards Committee.

Where cancellation of registration is necessary before the close of the term, tuition fees will be refunded as follows:

Period of Attendance	Percentage of Deduction	Percentage of Refund
None	None	100
Two days to one week	10	90
One week to two weeks	20	80
Two weeks to three weeks	30	70
Three weeks to four weeks	40	60
Four weeks to five weeks	50	50
Five weeks to six weeks	60	40

No student who has been in attendance more than one half of the term shall receive any refund of tuition.

ABSENCES

Each student who has been absent from a class shall, upon a lapse of not more than two class periods after an absence, present a pass from his preceptor or preceptress. Students off the campus may secure a pass from the chairman of the Scholarship and Standards Committee. In case of sickness, where students are under the care of the nurse, passes will be obtained through her only. All work lost through absence from class must be made up.

Where no legitimate excuse can be given for a class absence, it shall be deemed an unexcused absence. An unexcused absence will automatically reduce the grade to an E for the month in the class where the absence occurred. Failure to submit a pass from the preceptor within the time limit shall be evidence of failure to receive an excused absence.

Permission to go home, necessitating absences from classes, must be applied for and approved by the proper preceptor or preceptress in advance of such anticipated absence. Students are expected to present with their application a bona fide letter from the parents stating the reasons or need for such absence. In emergency, permission may be received from the superintendent who shall present the application and letter from the parent to the Scholarship and Standards Committee for approval. Failure to make the necessary arrangements shall be considered as evidence of an unexcused absence.

For the protection of the health of the student body it is necessary to insist that all students who go home or otherwise leave the campus and become ill while away, present to the school nurse immediately upon return a statement from a physician or surgeon giving the nature of the illness and approval of the student's return to school. This statement should be presented at the Health Service before the student enters the dormitory in which he or she resides.

Any student who fails to secure permission to be absent from classes from the preceptor or preceptress before leaving, and who is absent for more than one school day may also be required to present a physician's or surgeon's statement approving the student's return to school.

CLASSIFICATION

In order to be classified as a junior, a student must have not less than 42 credit hours of work.

In order to be classified as a senior, a student must have not less than 94 credit hours of work.

In order to be classified as an advanced student, a student must have not less than 160 credit hours of work.

In order to be classified as a special student, a student must be a high school graduate, or must have completed the advanced course.

SCHOLARSHIP STANDARDS

Marking System

Students are graded on a scale of A, B, C, D, and E. A is a high honor mark and E denotes failure. The mark "incomplete" is reserved for special cases and means that for reasons not within the control of the student, he has failed to meet a specific and important requirement of the course, but has, in other respects, done passing work. The incomplete must be removed the month after it has been received. Extension of time for the removal of incompletes may be granted in special cases. If the deficiency is not made up, the mark of E is automatically substituted for the incomplete. If a student drops a subject without permission of the Scholarship and Standards Committee, he receives a mark of E in the subject.

Honor Point System

Honor points are determined on the basis of grades. For each hour credit of A quality, students receive 3 honor points; of B quality, 2 honor points; and of C quality, 1 honor point. Work of D quality commands no honor points. When a course in which a student receives a mark of E is repeated, only the second grade is considered in reckoning the honor points.

SCHOLARSHIP REQUIREMENTS

In order to obtain a diploma or certificate from the school, a student must have as many honor points and credit hours as are required for graduation. This means that an average scholarship of C is required.

PROBATION AND ELIMINATION

A student who has less honor points than he has credit hours is placed on probation. A student is removed from probation when his total honor points equal his credit hours. A student on probation is subject to dismissal from the school. He may, however, appeal for reinstatement to the Scholarship and Standards Committee.

ELIGIBILITY

The following rules will govern eligibility for all interscholastic contests. The Scholarship and Standards Committee must approve all eligible students.

- A. The student must be enrolled in the school not less than one week before the contest.
- B. He shall be making passing grades in at least four subjects for which he is enrolled. These four subjects must total 20 credit hours and 20 honor points.

REQUIREMENTS FOR GRADUATION

Completion of the prescribed course of study, including all required work and enough electives to make a total of 160 credit hours.

Attainment of 160 honor points.

All students who expect to graduate from the three-year course are required to complete two summers of home project work. A summer of home project work is defined as completing at least one three-credit project or two two-credit projects. All boys who expect to graduate from the three-year course at the West Central School will be required to complete one crops project and either a livestock or a farm accounts project. Girls who expect to graduate from the three-year course must complete two food projects, two clothing projects, and either a home management or a home furnishing project.

Special cases may arise which make impossible the carrying out of the outlined schedule, in which case the student may, with the approval of the home project supervisor, complete one summer of project work and substitute other projects or thirteen and one-third school credits for each summer project work missed. Such substitution must be petitioned for on blanks provided by the project supervisor and must be approved by the chairman of the Scholarship and Standards Committee.

Candidates for graduation from the advanced or four-year course must complete the required work for the three-year course plus the required forty-five additional credits and honor points. They must also complete an additional summer of home project work or substitute thirteen and one-third extra school credits.

A satisfactory rating in attitude.

Payment of all accounts.

For students transferring from other schools, one full year of residence is required. Under no circumstances will any student be permitted to participate in the graduation exercises who has not completed, in full, all of the requirements for graduation.

HOME LIFE IN THE DORMITORIES

The dormitory life of the students while attending the West Central School of Agriculture is subject to supervision. Everything possible is done to promote a healthful, moral atmosphere.

The preceptors and preceptresses have charge of students in their dormitories, and the regulations enforced are for the good of all.

From 8:00 a.m. to 4:15 p.m. students are busy with their school work. From 4:15 to 6:00 p.m. is a recreation period during which students' time is at their own disposal. During study hours students are expected to be in their rooms and to be quiet so that all may study undisturbed. Students may leave the campus in the evening only upon permission of the preceptors or preceptresses. No firearms of any kind will be permitted in dormitories.

Ample entertainment and recreational facilities are provided at the school, therefore it is unnecessary for a student to go elsewhere for the same. A student who wishes to attend such functions as public dances is required to secure a letter of approval from his parent or guardian prior to the time of going; such letter to be sent by mail to the pre-

ceptor or preceptress of the building in which the student resides. The right to refuse such permission is reserved to the preceptor or preceptress.

The use of tobacco in dormitory rooms is strictly forbidden. Infraction of dormitory rules may be sufficient cause for dismissal from school. Any student found using intoxicating liquor on the school premises will be subject to expulsion from school.

USE OF AUTOMOBILES BY STUDENTS

Experience has shown that ownership or possession of an automobile by a student is usually detrimental to school work. Therefore, a regulation is in force prohibiting students from having automobiles in their possession while attending school. There are a few cases where an automobile is the only means of transportation to and from school, and in such instances an exception will be made, provided the student's parent or guardian makes arrangements with the superintendent prior to the time the student brings the car to school. Such automobiles will be kept in a designated parking lot during the time they are not used, and all keys to the same are to be left with the superintendent. In accepting custody of the automobile the superintendent and the University assume no responsibility for its safekeeping.

DISCIPLINE

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. The school does not wish to undertake the problem of disciplining students who are not in sympathy with its purposes.

BUILDINGS AND EQUIPMENT

The physical plant now includes thirteen modern brick and stone buildings which compose the educational group, and eighteen frame buildings which make up the farm group. The school group includes two girls' dormitories with facilities for 125 girls; three boys' dormitories with accommodations for 225 boys; Agricultural Hall, with stock judging pavilion, meat cutting, dairy, soils, chemistry, horticulture, botany, and farm crops laboratories, and classrooms for all agricultural and academic work; the Engineering Building with woodshop, forge shop, welding shop, farm mechanics laboratory, drafting room, and three lecture rooms; the Music Hall, with two studios and numerous practice rooms. The Business Training Department is also located in this building and includes typewriting, shorthand, business training, and penmanship rooms. The Dining Hall has two large dining rooms and modern kitchens. The Students' Hospital and Health Service Building is equipped with twenty-seven beds, a dispensary, and the nurses' quarters. The Home Economics Building has two foods laboratories, two sewing laboratories, laundering laboratory, home management room, classrooms, and departmental offices. The Administration Building houses the auditorium, the large library, and the administration, business, and registrar's offices. The Home Management Practice House will accommodate a group of ten people; and the Physical Education Building includes the gymnasium, swimming pool, locker rooms, and team training quarters.

The equipment in all shops and laboratories is ample and sufficient for the most practical and efficient instruction.

The eighteen farm buildings give ample housing facilities for the herds, flocks, and farm equipment which are available for student use.

ASSEMBLY PERIOD

An assembly period is held three times each week throughout the school year. All students are required to attend these assembly exercises. It is the purpose of the school to secure prominent speakers to address the student body at these morning exercises.

The assembly period is also used as a forum for public discussion of the many questions of the day and for announcements of importance to the student body.

RELIGIOUS WELFARE

In maintaining the highest moral and religious atmosphere and in fostering the development of complete manhood and womanhood—physical, intellectual, social, and spiritual—the student body and faculty have developed a close relationship with all of the churches in Morris. Students affiliate with the church of their preference and make it their church home while attending school. In addition to this affiliation, vesper services are held each Sunday on the school campus. These exercises are under the joint direction of the Faculty-Student Religious Welfare Committee. The Young Women's Christian Association is represented on the campus by a strong and active organization.

MUSICAL ORGANIZATIONS

The school musical organizations include a large chorus, a school orchestra, and a band. Students especially interested in music are urged to join one or more of these organizations and receive the training which they afford. The music clubs appear at various school functions. Public recitals are given at the close of the school year.

THE MOCCASIN

The *Moccasin* is the annual class book published by the senior class of the school. It gives an outline of all the school and class activities, is fully illustrated, and contains, in addition to brief articles of student interest, a record of the development and growth of the institution.

WEST CENTRAL NEWS

The *West Central School News* is a quarterly published by the faculty of the school. It serves as a community publication, and is a medium by which former students and alumni are kept in touch with one another and with the school. It is also published to disseminate among its readers useful information and the results of station work.

THE PROJECTOR

The *Projector* is a monthly news letter published from April through September for the instruction and inspiration of students carrying on home project work.

UNIVERSITY OF MINNESOTA LOAN FUNDS

Students attending the West Central School of Agriculture are afforded the opportunity of participating in the student loan funds available to students who attend the University of Minnesota. This money is loaned to worthy and deserving students at the West Central School in amounts not to exceed \$50 to any one person in one year, at the rate of 5 per cent per annum. Students interested in securing a student loan should correspond with the superintendent of the West Central School of Agriculture.

THE WEST CENTRAL SCHOOL OF AGRICULTURE LOAN FUND

The classes of 1930 and 1931 have left a loan fund of \$450 to be loaned to needy and worthy students. This money is loaned in amounts not to exceed \$50 to any one person in one year at the rate of 5 per cent per annum.

SEVENTH DISTRICT FEDERATION OF WOMEN'S CLUBS LOAN FUND

The Seventh District Federation of Women's Clubs presented the sum of \$1,000 to the West Central School of Agriculture in 1932 to be used as a loan fund to assist needy and worthy students to acquire an education at the West Central School. Students who benefit from this fund must reside in the Seventh District. This fund is loaned in amounts and under conditions that govern other student loan funds.

CALEB DORR CASH SCHOLARSHIPS

By a decision made in April, 1922, by the Board of Regents of the University of Minnesota, a part of the income from a bequest made by the late Caleb Dorr, of Minneapolis, was made available to the schools of agriculture. At the West Central School this fund is awarded to worthy students for excellence in scholarship and for achievement in leadership. The scholarships awarded are used to help defray the students' expenses while they are in school.

INTERSCHOLASTIC ACTIVITIES

Each year the school is represented by teams in debating, declamation, and stock and grain judging, which meet in interscholastic contests with students from similar institutions.

In athletics the school is represented by football, basketball, cross-country, and swimming teams.

LIBRARY

The library is well equipped to supply the needs of the students. A large number of books have been selected to meet the requirements of the various departments. These, with the government and station reports, are available for use by instructors and students.

The librarian is always ready to give assistance in directing students in the selection of books they may need in the pursuit of their work.

BOYS' AND GIRLS' CLUB WEEK

The annual Boys' and Girls' Club Week is held during June. This is a two-day course open to all boys and girls engaged in 4-H Club work. Boys are given special training in all of the boys' club projects. The girls are given work in home economics with special reference to the club projects. Games, music, and special entertainment will make the entire program of interest to all who attend. A special circular describing this short course is issued.

SHORT COURSE FOR HOMEMAKERS

An annual short course for homemakers is held during the month of June. The main object of this course is to provide a few days' rest, recreation, and instruction for the women in west central Minnesota. Talks, classes, and demonstrations along lines of interest to women will fill in part of the day. The large dormitory and dining hall will provide ample living accommodations and part of each day will be given to rest and recreation. A special bulletin describing this course will be issued.

EXPERIMENT STATION

The West Central School and Station is now conducting extensive experiments in crops; soils, horticulture, and animal husbandry. Special reports and bulletins are published from time to time giving the results of experimental work.

SCHOOL FARM

The farm comprises approximately 800 acres and furnishes an extensive laboratory for the work of the school. Information concerning the methods employed on the farm is always available to the students. The classroom work is supplemented with actual practice, either in the field or with laboratory practice using the crops grown on the farm.

STATION FLOCKS AND HERDS

The school now maintains excellent livestock herds and flocks, all of which are used for student work in the Animal Husbandry Department. Purebred Holstein and Shorthorn cattle, Percheron horses, Shropshire and Columbia sheep, Poland China hogs, and White Leghorn chickens are maintained for station and school purposes. These afford excellent opportunities for students to study intelligently the various courses in animal husbandry.

COURSES OF STUDY

Figures following the names of courses indicate the number of credit hours.

One credit hour is equivalent to one class period per week devoted to recitation or two such periods devoted to laboratory work.

A class period is forty minutes and a laboratory period is eighty-five minutes.

For description of the following courses see pages 20-29.

For description of home project work see pages 29-32.

High school courses equivalent to required courses will be substituted for them in the case of students who transfer from other schools.

COURSES FOR BOYS

In addition to the required courses as outlined below, a boy who wishes to graduate from the three-year course must, during the time he is in school, elect three courses totaling at least 6 credit hours in each of the following: Agronomy and Soils, Animal and Poultry Husbandry, and Agricultural Engineering; and two courses in Agricultural Economics. He may choose these from the elective courses listed. During any one term, at least 23 required and elective credit hours must be carried.

FRESHMAN YEAR

First Term

Second Term

Required

English I A, 5
 §Farm Arithmetic A, 3
 General Science A, 3
 †Freshman Lectures—no credit

English I B, 5
 §Farm Arithmetic B, 3
 General Science B, 3

Either Term

§Word Study and Penmanship, 3

Electives

*Carpentry I A, 2
 *Forge I A, 2
 *Farm Mechanics I A, 2
 Management of Laying Flock, 3
 Elementary Beekeeping, 2
 Fruit and Vegetable Crops, 3
 Automotive Engineering I A, 3
 Livestock Production, 5

*Carpentry I B, 2
 *Forge I B, 2
 Farm Mechanics I B, 2
 Incubation and Brooding, 3
 Elementary English
 Automotive Engineering I B, 3
 *Grain Crops, 5

Either Term

Chorus, 1
 Group or Private Music, 1 or 2

JUNIOR YEAR

First Term

Second Term

Required

English II A, 5

English II B, 5

Either Term

Farm Accounts, 3
 United States Government, 5

* Required as a prerequisite for later courses.

† Not required of transfer students.

§ May be removed as a requirement by special examination.

First Term

Second Term

Electives

Grain Judging, 2
 *Physics, 5
 Farm Mechanics II A, 3
 Plant Diseases, 3
 Stock Judging A, 1
 Argumentation, 2
 Pure Seed Production, 2
 Conservation of Natural Resources, 2
 Fruit and Vegetable Crops, 3
 *Farm Structures A, 1
 Elementary Beekeeping, 2
 Business Training A, 5
 Preflight A, 3

Landscape Gardening, 2
 *Feeds and Feeding, 5
 Soils, 4
 Farm Mechanics II B, 3
 *Electricity, 4
 Stock Judging B, 1
 Forage Crops, 2
 Incubation and Brooding, 3
 Public Speaking, 2
 Arc Welding, 2
 Farm Structures B, 1
 Business Training B, 5
 Preflight B, 3

Either Term

*Gas Welding, 2
 Typewriting, 5
 Group or Private Music, 1 or 2
 Chorus, 1
 Mechanical Drawing, 1

SENIOR YEAR

First Term

Second Term

Required

English III A, 5
 United States History A, 5
 Chemistry A, 3

English III B, 5
 United States History B, 5
 Chemistry B, 3

Electives

*Farm Management A, 3
 Livestock Management, 3
 Dairy Production, 3
 Pure Seed Production, 2
 *Farm Structures A, 1
 Animal Breeding, 3
 *Bookkeeping A, 5
 *Elementary Algebra A, 5
 Farm Marketing, 2
 Farm Mechanics III, 4
 *Commercial Law A, 5
 Economics, 3
 Mechanical Drawing, 1
 Special Problems in Farm Crops, 2
 Conservation of Natural Resources, 2

Farm Management B, 3
 Animal Diseases, 2
 Rural Sociology, 3
 Farm Structures B, 1
 Advanced Electricity, 3
 Bookkeeping B, 5
 Elementary Algebra B, 5
 Farm Finance, 3
 Livestock Problems, 2
 Commercial Law B, 5
 First Aid, 2

Either Term

Meats, 4
 Typewriting, 5
 Shorthand, 5
 Gas Welding, 2
 Arc Welding, 2
 Advanced Stock Judging, 2
 Group or Private Music, 1 or 2
 Chorus, 1

Two credits shall be allowed for participation in interscholastic debate. Members of interscholastic athletic teams will be excused from gymnasium classes. Not more than five special credits, including credits for debate and music, shall count toward graduation.

* Required as a prerequisite for later courses.

COURSES FOR GIRLS

Through their choice of electives, students may prepare themselves for one of several lines of work. At the time of registration, students will be advised how to select their work so that it will prepare them for the vocation in which they are interested. They may prepare for business positions, for teacher training work, for college entrance, or for nurse's training.

HOME ECONOMICS COURSE OF STUDY

First Term

Second Term

Required

FRESHMAN YEAR

English I A, 5
 General Science A, 3
 †Social Training I A, 2
 Home Accounts I A, 3
 ‡Word Study I A, 2
 Physical Education, ½

English I B, 5
 General Science B, 3
 Social Training I B, 2
 Home Accounts I B, 3
 ‡Word Study I B, 2
 Physical Education, ½

Electives

*Clothing I A, 3
 *Foods I A, 3
 *Drawing and Design I A, 2
 Management of Laying Flock, 3

*Clothing I B, 3
 *Foods I B, 3
 *Drawing and Design I B, 2
 Incubation and Brooding, 3
 *Landscape Gardening, 2

Either Term

Freshman Vocal Study, 1
 Group or Private Music, 1 or 2
 Chorus, 1

JUNIOR YEAR

First Term

Second Term

Required

English II A, 5
 Home Furnishing II A, 3
 Physical Education, ½

English II B, 5
 Home Furnishing II B, 3
 Physical Education, ½

Either Term

United States Government, 5

Electives

*Foods II A, 3
 *Clothing II A, 3
 *Crafts A, 2
 Wardrobe Planning II A, 2
 *Laundering, 2
 *Home Nursing II A, 3
 Fruit and Vegetable Crops, 3
 Chemistry A, 3
 Typewriting A, 5

*Foods II B, 3
 *Clothing II B, 3
 Crafts B, 2
 *Home Nursing II B, 3
 Incubation and Brooding, 3
 Household Equipment II B, 2
 *Child Care and Training, 3
 Chemistry B, 3
 Typewriting B, 5

Either Term

Group or Private Music, 1 or 2
 Chorus, 1

* Required as a prerequisite for later courses.

† Not required of transfer students.

‡ May be removed as a requirement by special examination.

COURSES OF STUDY

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SENIOR YEAR

First Term

Second Term

Required

English III A, 5
Home Management A, 3
United States History A, 5
Economics of Buying A, 3
Clothing III A, 4
Home Nursing III A, 3
Physical Education, ½

English III B, 5
Home Management B, 3
United States History B, 5
Clothing III B, 4
Home Nursing III B, 3
Foods III B, 3
Physical Education, ½

Either Term

Home Management House, 8

Electives

*Crafts A, 2
*General History A, 5
*Elementary Algebra A, 5
*Bookkeeping A, 5
*Commercial Law A, 5

Crafts B, 2
General History B, 5
Incubation and Brooding, 3
Elementary Algebra B, 5
Rural Sociology, 3
Bookkeeping B, 5
Commercial Law B, 5

Either Term

Typewriting, 5
Group or Private Music, 1 or 2
Chorus, 1

BUSINESS TRAINING COURSE OF STUDY

Girls who wish to make the transfer from the regular home economics course to the business training course may do so at the end of their junior year provided they have met the following requirements:

Completed all required courses in the freshman and junior year.

Presented a written statement of approval from parents or guardian.

Met scholastic standards set up by the business training department, and secured approval of their faculty adviser.

FRESHMAN YEAR

Same as for home economics course.

JUNIOR YEAR

Same as for home economics course, except that Typing A and B must be elected.

SENIOR YEAR

First Term

Second Term

Required

English III A, 5
United States History A, 5
Shorthand A, 5
Beginners' Dictation A, 5

English III B, 5
United States History B, 5
Shorthand B, 5
Beginners' Dictation B, 5

Electives

Elementary Algebra A, 5
General History A, 5
Bookkeeping A, 5
Commercial Law A, 5

Elementary Algebra A, 5
General History B, 5
Bookkeeping B, 5
Commercial Law B, 5
Rural Sociology, 3

* Required as a prerequisite for later courses.

WEST CENTRAL SCHOOL AND STATION

COURSES FOR BOYS AND GIRLS

ADVANCED YEAR AND COLLEGE PREPARATORY COURSES

First Term

Second Term

Required

English IV A, 5
 Elementary Algebra A, 5
 Plane Geometry A, 5
 General History A, 5
 Botany, 5

English IV B, 5
 Elementary Algebra B, 5
 Plane Geometry B, 5
 General History B, 5

Electives

Any course not previously completed during the regular three-year program or any business training courses. Attainment of 45 honor points and 45 credits required to complete advanced year.

HIGH SCHOOL GRADUATES

Graduates of high schools are at liberty to select from all courses offered. The following list of courses may be used as a guide for making up a program of study.

AGRICULTURE

Fall Term

Winter Term

Economics
 Farm Management A
 Farm Accounts
 Farm Marketing
 Plant Diseases
 Pure Seed Production
 Special Problems in Farm Crops
 Grain Judging
 Livestock Management
 Dairy Production
 Management of Laying Flock
 Conservation of Natural Resources
 Fruit and Vegetable Crops

Farm Finance
 Farm Management B
 Soils
 Advanced Stock Judging
 Feeds and Feeding
 Animal Diseases
 Animal Breeding
 Livestock Problems
 Elementary Beekeeping
 Fruit and Vegetable Crops
 Incubation and Brooding
 Landscape Gardening

Electives

BUSINESS TRAINING COURSES

Fall Term

Winter Term

Bookkeeping A
 Advanced Bookkeeping A
 Business Spelling and Penmanship A
 Typewriting A
 Advanced Typewriting A
 Business English A
 Shorthand A
 Beginners' Dictation A
 Dictation A
 Secretarial Studies A
 Commercial Law A
 Business Machines

Bookkeeping B
 Advanced Bookkeeping B
 Business Spelling and Penmanship B
 Typewriting B
 Advanced Typewriting B
 Business English B
 Shorthand B
 Beginners' Dictation B
 Dictation B
 Secretarial Studies B
 Commercial Law B
 Business Machines

HOME ECONOMICS

Fall Term

Foods II A
 Home Management A
 Home Management House
 Laundering
 Economics of Buying III A
 Clothing II A
 Clothing III A
 Wardrobe Planning
 Home Furnishing II A
 Crafts A
 Home Nursing III A

Winter Term

Foods II B
 Foods III B
 Home Management B
 Home Management House
 Child Care and Training
 Household Equipment II B
 Clothing II B
 Clothing III B
 Home Furnishing II B
 Home Nursing II B
 Home Nursing III B
 Crafts B

NOTE—Students should have had some training in home economics in either junior or senior high school; otherwise it will be necessary to start with the beginning courses.

MECHANICAL TRAINING

Fall Term

Farm Structures A
 Forge I A
 Farm Mechanics I A
 Farm Mechanics II A
 Farm Mechanics III A
 Automotive Engineering I A
 Electricity
 Physics
 Arc Welding
 Gas Welding

Winter Term

Farm Structures B
 Forge I B
 Farm Mechanics I B
 Farm Mechanics II B
 Automotive Engineering I B
 Advanced Electricity
 Arc Welding
 Gas Welding

DESCRIPTION OF COURSES

AGRICULTURAL ECONOMICS

- Economics.** A study of fundamental economic principles including the economic organization for production, demand and supply, price and value, the economics of government, the nature of money and banking, international trade, and other current economic problems. Rec. 3 hrs.; 3 credits.
- Farm Finance.** A study of the financial structure of agriculture, rural taxation, the relation of tariffs and the monetary system to the agricultural industry. The Farm Credit Administration is fully covered. Rec. 3 hrs.; 3 credits.
- Farm Accounts.** A study of farm accounts. The student keeps a practical set of books on the year's work, from the taking of the inventory to closing the accounts at the end of the year. Rec. 3 hrs.; 3 credits.
- Farm Management A.** A study of farm organization as related to types of farming, combinations of enterprises, crop rotation, soil management, field and farmstead arrangement, and the efficient use of labor and equipment. Rec. 3 hrs.; 3 credits.
- Farm Management B.** An advanced course in farm organization. Farm budgeting will be given important consideration. Prerequisite: Farm Management A. Rec. 3 hrs.; 3 credits.
- Farm Marketing.** A study of the present system of distributing farm products. Special study is made of co-operative laws and co-operative marketing organizations. Rec. 2 hrs.; 2 credits.

AGRICULTURAL ENGINEERING

- Carpentry I A.** Carpentry; care, use, and sharpening of tools; laying-off work; making of joints and framing, work designed to be especially helpful in planning, framing, and construction of farm buildings. Lab. 2, 2 hrs.; 2 credits; fee \$1.
- Carpentry I B.** Continuation of Carpentry I A, with emphasis placed on completion of some project selected by the student. Prerequisite: Carpentry I A. Lab. 2, 2 hrs.; 2 credits; fee \$1.
- Farm Structures A.** Design, location, and erection of farm buildings. A study is made of roofs, pitches, trusses, etc. Exercises in building, framing, window and door frame construction. Part of the time is devoted to mechanical drawing and plan reading. Lab. 1, 2 hrs.; 1 credit.
- Farm Structures B.** A continuation of Farm Structures A. The student draws plans and makes up the material list for a farm building. Prerequisite: Farm Structures A. Lab. 1, 2 hrs.; 1 credit.
- Forge I A.** Blacksmithing. Forging and welding of mild steel. Specific instruction in making and maintaining reducing fire and in the basic forge operations of drawing, bending, punching, upsetting, and welding. Lab. 1, 4 hrs.; 2 credits; fee \$1.
- Forge I B.** Continuation of Forge I A. Lab. 2, 2 hrs.; 2 credits; fee \$1.
- Farm Mechanics I A.** A course designed to be of help in repairing general farm machinery and equipment. Work is offered in soldering, rope splicing, knots, belt lacing, use of taps and dies, tool sharpening and adjustment, harness repair work, etc. Lab. 2, 2 hrs.; 2 credits; fee \$1.
- Farm Mechanics I B.** A continuation of Farm Mechanics I A. Emphasis is placed on some definite repair project which involves use of shop tools and equipment. Prerequisite: Farm Mechanics I A. Lab. 2, 2 hrs.; 2 credits; fee \$1.
- Farm Mechanics II A.** Use of farm level—simple exercises in "running levels," chaining and measuring land. Exercises in map reading, making of farm plats from measurements taken in the field. Rec. 2 hrs.; lab. 1, 2 hrs.; 3 credits.

- Farm Mechanics II B. A study is made of all types of farm machinery, their adjustment and care. Materials used in the construction of farm machinery are covered. Selection of machinery for the field. Rec. 2 hrs.; lab. 1, 2 hrs.; 3 credits.
- Farm Mechanics III A. The first six weeks are given to a study of the uses of concrete about the farm, grading and proportioning of sand and gravel, water cement ratios, mixing and placing of concrete, use of reinforcing in concrete, and the estimating of materials, etc. The last six weeks are devoted to a study of modern lighting, heating, ventilating, plumbing, and sewage disposal systems for the farmstead, their cost of installation, care, and maintenance. Prerequisite: Physics and Electricity I. Rec. 3; lab. 1, 2 hrs.; 4 credits.
- Automotive Engineering I A. A study is made of internal combustion engines. Emphasis is placed on stationary farm engines, tractor, truck, and automobile motors and their accessories. Rec. 2 hrs.; lab. 1-2 hrs.; 3 credits.
- Automotive Engineering I B. Practice is given in the adjustment, operation, and maintenance of all types of automotive equipment as found on the modern farm. Prerequisite: Automotive Engineering I A. Rec. 2 hrs.; lab. 1-2 hrs.; 3 credits.
- Electricity. Kinds of electrification, magnetism, electromagnetism, magnetic induction, chemical generators, dynamos, motors, etc. Rural electrification, wiring of farm buildings, maintenance of electrical appliances in the home. Prerequisite: Physics. Rec. 3 hrs.; lab. 1, 2 hrs.; 4 credits.
- Advanced Electricity. A continuation of Electricity. The student is required to make power calculations, in both D.C. and A.C. circuits. Rec. 2 hrs.; lab. 1, 2 hrs.; 3 credits.
- Mechanical Drawing. Principles of drafting, lines, lettering, views of objects, making of working drawings, interpretation of drawings. Lab. 2 hrs.; 1 credit.
- Gas Welding. A careful study is made of the apparatus, of safety measures, of action of the various metals under the torch, and uses of flux. Student begins by running simple beads, gradually working into actual repair projects on welding, brazing, and cutting with the torch. Prerequisites: Forge I A and I B. Rec. 1 hr.; lab. 1, 2 hrs.; 2 credits; fee \$3.
- Arc Welding. The course covers practice in making flat, horizontal, vertical up and down and overhead welds with bare and coated electrodes. Practice is given on both D.C. and A.C. welding machines. Prerequisite: Gas Welding. Rec. 1 hr.; lab. 2 hrs.; 2 credits; fee \$6.
- Preflight A. The course is intended to familiarize the student with the rudiments of aerodynamics, meteorology, navigation, and Civil Air Regulations. Rec. 3 hrs.; 3 credits.
- Preflight B. Continuation of subject matter covered in Preflight A. Rec. 3 hrs.; 3 credits.

AGRONOMY AND SOILS

- Grain Crops. A study of corn and the principal cereal crops with emphasis placed upon the types and varieties most desirable, soil and cultural requirements, seed selection and preparation, cost of production, harvesting, and methods of improving. Rec. 5 hrs.; 5 credits.
- Grain Judging. Score card practice, commercial grading and judging work, with the object in view of making the student proficient in the selection and growing of pure-bred seed. Prerequisite: Grain Crops. Lab. 2, 2 hrs.; 2 credits.
- Forage Crops. A study of the leguminous crops, clover, alfalfa, etc., pastures and meadows, and the annual forage crops. Cultural requirements of forage crops and their importance to the farm. Lab. 2, 2 hrs.; 2 credits.

- Pure Seed Production. Grow, harvest, clean, test, and secure certification from the Minnesota Crop Improvement Association of any of the recommended varieties of grains or corn. Prerequisite: Grain Crops. Lab. 2, 2 hrs.; 2 credits.
- Plant Diseases. A study of the most important diseases affecting farm crops, with the recommended methods for control. Rec. 3 hrs.; 3 credits.
- Soils. This course is applied to the needs of western Minnesota. Soil formation, soil types, soil physics, soil chemistry, soil tillage, and the use of fertilizers are given attention. Prerequisite: Chemistry A. Rec. 3 hrs.; lab. 1, 2 hrs.; 4 credits.
- Special Problems in Farm Crops. A course for seniors and advanced students. Takes up problems of a practical nature in farm crops and farm management and covers them more fully than do the elementary courses. Prerequisites: Grain Crops and Forage Crops, or their equivalent. Rec. 2 hrs.; 2 credits.

ANIMAL AND DAIRY HUSBANDRY

- Livestock Production. An introduction to the livestock industry. The place of livestock on the farm is discussed, the types and breeds best adapted to the needs of different kinds of farms are studied. Principles of care and management outlined. Practice in selection and judging. Rec. 5 hrs.; 5 credits.
- Stock Judging A. Comparative judging of beef cattle, swine, and sheep. Lab. 1, 2 hrs.; 1 credit.
- Stock Judging B. An advanced course in comparative judging of dairy cattle and horses. Lab. 1, 2 hrs.; 1 credit.
- Advanced Stock Judging. Open to those trying out for the interscholastic stock judging team. Lab. arranged; 2 credits.
- Feeds and Feeding. Principles of animal nutrition, composition and nutritive value of feeds, feeding standards, methods of feeding. Rec. 5 hrs.; 5 credits.
- Livestock Management. Production of beef cattle, sheep, swine, and horses, both purebred and market stock, including, from a practical standpoint, feeding and management of the herd or flock, selection of breeding stock, and arrangement of buildings and yards. Rec. 3 hrs.; 3 credits.
- Dairy Production. This course is designed to fit the student for the successful management of a dairy herd. The course prepares students for positions as testers in dairy herd improvement associations. Prerequisite: Feeds and Feeding. Rec. 2 hrs.; lab. 1, 2 hrs.; 3 credits.
- Animal Diseases. Cause and prevention of the more common diseases of farm animals, including emergency treatment. Rec. 2 hrs.; 2 credits.
- Animal Breeding. Theory and practice of animal breeding as it affects the economic value of our livestock. Rec. 3 hrs.; 3 credits.
- Meats. Practice in killing, cutting, and curing of meats for home consumption on the farm. Course is limited to seniors, advanced and special students. Lab. 8 hrs.; 4 credits.
- Livestock Problems. A seminar and reading course in which the student selects problems of special interest to him. Open only to seniors and advanced students with at least 10 credit hours in animal husbandry. Rec. 2 hrs.; 2 credits.

BEE CULTURE

- Elementary Beekeeping. Fundamentals of bee behavior throughout the cycle of the year. Fundamentals of beekeeping practice throughout the year. Modern equipment for beekeeping practice. Starting with bees, increase, moving, uniting, feeding. Rec. 2 hrs.; 2 credits.

BUSINESS

- Business Spelling and Penmanship A. An advanced course in spelling and penmanship for students taking the business course. Rec. 3 hrs.; 3 credits.
- Business Spelling and Penmanship B. Continuation of Business Spelling and Penmanship A. Rec. 3 hrs.; 3 credits.
- Typewriting A. Individual instruction in the manipulation of all parts of the machine. The keyboard is learned by the touch method. Practical lessons are used. Drill 5 hrs.; lab. 5 hrs.; 5 credits; fee \$1.50.
- Typewriting B. A continuation of Typewriting A. 2 or 5 credits; fee \$1.50.
- Advanced Typewriting A. For those who have had previous typing experience and can meet the set standards. Accuracy and speed are stressed. 2 or 5 credits; fee \$1.50.
- Advanced Typewriting B. A continuation of Advanced Typewriting A. 2 or 5 credits; fee \$1.50.
- Shorthand A. The Gregg System taught according to the functional method and supplemented with speed studies is used. Rec. 5 hrs.; 5 credits.
- Shorthand B. Continuation of Shorthand A. Rec. 5 hrs.; 5 credits.
- Beginners' Dictation A. Dictation and transcription drill for those students taking Shorthand A. Rec. 5 hrs.; 5 credits.
- Beginners' Dictation B. Continuation of dictation and transcription drill for those students taking Shorthand B. Rec. 5 hrs.; 5 credits.
- Dictation A. For those who have had previous training in shorthand. A continuation of Shorthand A, stressing speed, accuracy, and machine transcription. Rec. 5 hrs.; 5 credits.
- Dictation B. Continuation of Dictation A. 5 hrs.; 5 credits.
- Business English A. A thoro study of grammar and effective English usage in relation to business. Rec. 5 hrs.; 5 credits.
- Business English B. Continuation of Business English A, dealing with the writing of business letters and other forms. Rec. 5 hrs.; 5 credits.
- Secretarial Studies A. Course includes training in office routine, such as filing, indexing, and stenciling. Individual instruction in dictaphone. Rec. 5 hrs.; 5 credits.
- Secretarial Studies B. Continuation of Secretarial Studies A. Rec. 5 hrs.; 5 credits.
- Bookkeeping A. Preparation and interpretation of balance sheets; purpose of accounts and principles of account classification; profit and loss statements. Rec. 5 hrs.; 5 credits.
- Bookkeeping B. Source of ledger entries; cash receipts and disbursements; general journal; purchase and sales records; practice set. Rec. 5 hrs.; 5 credits.
- Advanced Bookkeeping A. Controlling accounts; records of original entry; business practice and procedure; depreciation and bad debts; accruals and deferred items; adjusting and closing entries; partnerships, departmental revenue accounts; practice set. Rec. 5 hrs.; 5 credits.
- Advanced Bookkeeping B. Nature and characteristics of the corporation; proprietorship in the corporation; formation and operation of a corporation; corporation accounts; fixed and intangible assets; manufacturing; analysis of financial statements; use of statistical data in business management; graphical method of presenting accounting facts. Rec. 5 hrs.; 5 credits.
- Commercial Law A. A thoro study is made of contracts, sales, agency, and negotiable instruments. Rec. 5 hrs.; 5 credits.
- Commercial Law B. Continuation of Commercial Law A and further study includes guaranty, bailment, insurance, real property, fixtures, partnerships, corporations, and bankruptcy. Rec. 5 hrs.; 5 credits.

- Business Machines.** Operation of the more common machines found in offices. Includes practice on adding machines, listing machines, calculators, and duplicating devices. Rec. 1 hr., lab. 4 hrs.; 3 credits.
- Business Training A.** A course intended to give the student an understanding of the fundamental business practices, contributing to the success of individuals in all walks of life; an understanding of the relationship between business and society and providing the student with a basic background for the further study of business, as well as a better understanding of the student's own aptitudes, abilities, and interests in the business field. Subject matter includes our business environment, money and banking services, thrift, spending money wisely, sharing economic risks, and accumulating savings. Rec. 5 hrs.; 5 credits.
- Business Training B.** Continuation of Course A, includes travel, communication services, shipment of goods, keeping and locating useful and important information, and business and society. Rec. 5 hrs.; 5 credits.

ENGLISH AND PUBLIC SPEAKING

- English I A.** Functional grammar, capitalization, punctuation, word study, and library instruction. Oral composition, discussion, reports, and simple debates. Extensive reading with memory work from various types of literature of representative English and American authors. Rec. 5 hrs.; 5 credits.
- English I B.** Continuation of English I A. Written composition with special emphasis on letter writing and story telling. Rec. 5 hrs.; 5 credits.
- English II A.** Review of functional grammar, advanced work based on variety in sentence structure and the paragraph. Extensive reading with memory work from various types of literature of representative English and American authors. Rec. 5 hrs.; 5 credits.
- English II B.** Continuation of English II A. Library instruction, gathering information, organization, oral reports, and letter writing. Rec. 5 hrs.; 5 credits.
- English III A.** Remedial work in grammar, punctuation, and the mechanics of English with special emphasis on the clause and phrase for variety and clearness. Understanding of American life and ideals of the past and the present by the study of great American writers and their works. Rec. 5 hrs.; 5 credits.
- English III B.** Continuation of English III A. Gathering material from books and periodicals, compiling a bibliography, with special emphasis on the logical outline in exposition and argument. Stress on public speaking, and formal and informal debate. Rec. 5 hrs.; 5 credits.
- English IV A.** Advanced work in grammar, good usage, variety in diction, and punctuation. Creative writing and library research. Extensive reading from English literature to modern times with major emphasis upon the selections themselves and minor attention to historical backgrounds and biography of writers. Rec. 5 hrs.; 5 credits.
- English IV B.** Continuation of English IV A. Rec. 5 hrs.; 5 credits.
- Elementary English.** A course for older boys and men who attend school during the winter term. Reading, spelling, and a brief review of the principles of grammar is given. Rec. 3 hrs.; 3 credits.
- Argumentation.** Principles of debate are studied, gathering of evidence and outlining arguments stressed. Practice in speaking. Rec. 2 hrs.; 2 credits.
- Public Speaking.** A study of the facts and principles common to all speaking, together with platform projects. Rec. 2 hrs.; 2 credits.
- Word Study and Penmanship.** Drill in spelling and usage of common words, and penmanship. Rec. 3 hrs.; 3 credits.

Word Study I A (Girls). A study of the spelling, meaning, use, and pronunciation of words designed to increase and improve the student's written and oral work. Rec. 2 hrs.; 2 credits.

Word Study I B. A continuation of Word Study I A. Rec. 2 hrs.; 2 credits.

HOME ECONOMICS

To defray costs of laboratory supplies used in the various courses, a fee of \$2 per term is charged all students registering in home economics courses.

FOODS AND HOME MANAGEMENT

Foods I A. This course is divided into four parts. It gives the basic principles and standards for each of the following: canning, food service, planning and preparation of breakfast, and breads. Lab. 3, 2 hrs.; 3 credits.

Foods I B. A continuation of Foods I A as applied to luncheons or suppers. A study of batters, doughs, cakes, cookies, and salads is included here. Lab. 3, 2 hrs.; 3 credits.

Foods II A. A study of body needs, planning of dietaries, menus, and meals. Prerequisites: Foods I A and B. Lab. 3, 2 hrs.; 3 credits.

Foods II B. A continuation of Foods II A, the actual serving of meals to small groups, and a detailed study of meats. Lab. 3, 2 hrs.; 3 credits.

Foods III. This course is planned to help the girls realize the possibility of using their foods training to provide an income and to aid them in planning, preparing, and serving special foods for club meetings, ladies' aids, group suppers, buffet meals, teas, etc. Rec. and lect. 2 hrs.; 2 hrs. lab. as arranged; 3 credits.

Home Management A. A study of the problems of management in the home including family and community relationships. Prerequisites: Child Care and Training, Foods I and II, Laundering. Rec. 3 hrs.; 3 credits.

Home Management B. A continuation of Home Management A. Includes a study of possible vocations for the home economics trained girl. Rec. 3 hrs.; 3 credits.

Home Management House. Senior girls spend eight weeks living in the practice house, where, with the supervision of a resident instructor, they actually manage the home, and care for a child. 8 credits.

Child Care and Training. This course is designed to give an understanding of the place of the child in the home, through the study of the physical care and mental training of the infant and preschool child. Rec. 3 hrs.; 3 credits.

Laundering. Includes care of laundry and utensils, study of water, soap, starch, removal of stains, washing of woolen and silk garments, ironing, and the principles of dry cleaning. Rec. 1 hr.; lab. 1, 2 hrs.; 2 credits.

Social Training I A. The subject matter includes the study of conversation, table etiquette, dress, boy and girl relationships, and social correspondence. Rec. 2 hrs.; 2 credits.

Social Training I B. Continuation of Social Training I A. Rec. 2 hrs.; 2 credits.

Economics of Buying A. A study of textiles, fibers, and construction. An application of these facts to good buying practices in household furnishings and clothing. Rec. 3 hrs.; 3 credits.

Home Accounts I A. Simple arithmetic as applied in figuring costs of what we produce and consume. The making of budgets and keeping of accounts as suited to needs. Rec. 3 hrs.; 3 credits.

Home Accounts I B. Continuation of Home Accounts A. Rec. 3 hrs.; 3 credits.

Household Equipment II B. A study of the basic principles for the selection and use of large and small equipment used in the home. Lab. 2, 2 hrs.; 2 credits.

CLOTHING AND RELATED ART

All materials for clothing courses must be selected in consultation with the instructor. Students are requested not to bring materials from home, unless arrangements have been made with the instructor. Each girl should have a thimble, tape measure, scissors, and needles.

- Clothing I A. One apron and a holder to be used in foods laboratory classes, and a pair of pajamas are made. Fundamentals in hand sewing, the use of the sewing machine, and the use of a commercial pattern are stressed. Lab. 3, 2 hrs.; 3 credits.
- Clothing I B. A cotton slip and a cotton dress are made. A variety of seams, and more complicated construction techniques are emphasized. A demonstration of sewing machine attachments is given. Lab. 3, 2 hrs.; 3 credits.
- Clothing II A. A cotton dress for use in foods classes and the Home Management House is made. A study of construction techniques peculiar to wool fiber is made, and one wool dress is constructed. Lab. 2, 3 hrs.; 3 credits.
- Clothing II B. Children's clothing is studied and one child's garment constructed. Another demonstration and an opportunity to practice the use of sewing machine attachments is given. A rayon dress is made. Lab. 2, 3 hrs.; 3 credits.
- Clothing III A. A course in make-over. Each student in conference with the instructor decides on the problem. A study of millinery is included. Prerequisites: Clothing II A and B, or equivalent. Lect. 1 hr.; lab. 3, 2 hrs. or lab. 4, 2 hrs.; 4 credits.
- Clothing III B. All types of tailoring details are studied. One suit or coat is constructed. A student must receive permission from the clothing instructor before registering for this course. Lect. 1 hr.; lab. 3, 2 hrs. or lab. 4, 2 hrs.; 4 credits.
- Wardrobe Planning II A. This course is so planned that it enables the girl to plan clothes appropriate to various types, figures, and colorings, and decide which are suitable for long wear. Lect. 2, 1 hr.; 2 credits.
- Drawing and Design I A. Principles of design and color harmony with emphasis upon design as expressed in clothing, house furnishings, and articles in common use. Lab. 2, 2 hrs.; 2 credits.
- Drawing and Design I B. Application of design principles to costume selection and design. Lab. 2, 2 hrs.; 2 credits.
- Home Furnishings II A and B. Courses include the fundamentals of artistic home planning and furnishing. Finishes for walls and floors, as well as selection of rugs or carpets, curtains, and furniture are studied. Work of Old World and modern artists is studied. Renovation of used furniture is discussed and, whenever possible, carried out in the laboratory. Prerequisites: Drawing and Design, Landscape Gardening. Rec. and lect. 3, 2 hrs.; 3 credits each course.
- Crafts A. Application of the principles of design to the making of worth-while decorative household articles and personal belongings. Lab. 2, 2 hrs.; 2 credits.
- Crafts B. Continuation of Crafts A, with more advanced problems. Lab. 2, 2 hrs.; 2 credits.
- Home Nursing II A. Structure and function of the human body and personal hygiene. Rec. 3 hrs.; 3 credits.
- Home Nursing II B. Stresses the principles of first aid. Rec. 3 hrs.; 3 credits.
- Home Nursing III A. Home care of the sick, including prevention and care of communicable diseases. Rec. 3 hrs.; 3 credits.
- Home Nursing III B. Maternal and child hygiene. Rec. 3 hrs.; 3 credits.

HORTICULTURE

Fruit and Vegetable Crops. Planning, planting, culture, value, and management of the orchard and garden on the general farm. Rec. 3 hrs.; 3 credits.

Landscape Gardening. A study of trees, shrubs, and flowers adapted to western Minnesota and the proper arrangement of these plants on the farmstead. Rec. 2 hrs.; 2 credits.

MATHEMATICS

Farm Arithmetic A (Boys). Training in simple mathematical processes, application of principles to problems requiring measurements of material, extension, capacity, with practical applications to farm work. Helpful in the mathematics of the technical school course. Rec. 3 hrs.; 3 credits.

Farm Arithmetic B (Boys). Continuation of Farm Arithmetic A. Rec. 3 hrs.; 3 credits.
Elementary Algebra A. Includes the study of symbols used in mathematics, the formula, simple equations, exercises and problems involving positive and negative numbers, the making and interpretation of graphs. Rec. 5 hrs.; 5 credits.

Elementary Algebra B. Practice in multiplication, factoring, division, and fractions is followed by the study of fractional and literal equations, linear equations, ratio, proportion, square root, radicals, and quadratic equations. Rec. 5 hrs.; 5 credits.

Plane Geometry A. Begins with an introductory study of geometric terms, constructions and methods of proof. Includes propositions involving triangles, perpendicular and parallel lines, polygons and the constructions based upon them. Rec. 5 hrs.; 5 credits.

Plane Geometry B. A continuation of Plane Geometry A including the study of circles, angles and arcs, the measurement of angles and arcs, loci, proportional line segments, similar polygons, and area. Rec. 5 hrs.; 5 credits.

MUSIC

Private music instruction includes twelve private lessons and daily supervised practice periods. Music Hall is equipped with practice rooms for the use of music students. The fees for private lessons pay also for the use of a practice studio.

Piano. Elementary training in scales, chords, arpeggios, and selected studies. Technical exercises for the development of the hands, fingers, and arms. Studies and compositions adapted to the individual student. 2 credits; fee \$7.

Voice. Fundamentals of voice culture, breathing, placement, formation of vowels, diction, and flexibility. Studies and solos selected according to the ability of the individual student. 2 credits; fee \$7.

Violin. Methods and studies by Grum, Fischel, Sevcik, Dancla, Kayser, Kreutzer, Rode, and Fiorillo. Solos adapted to each grade. 2 credits; fee \$7.

Organ. For student sufficiently advanced in music. Hammond electric organ is used. 2 credits; fee \$7.

Band and Orchestral Instruments. Carefully arranged courses in each instrument. Cello, trombone, clarinet, trumpet, saxophone, drums, etc. 1 credit; fee \$7.

Freshman Vocal Study. A beginning course in vocal study for freshmen. Principles of musical notation, formation of scales, musical terms, sight reading, ear training, and the appreciation of music taught through participation in group singing. Rec. 1 hr.; 1 credit.

Chorus. Both sacred and secular music are sung by this group. The chorus sings on Sunday evenings at the vesper service and furnishes music for assembly programs and concerts throughout the year. 1 credit.

Orchestra. Two orchestras, one for beginners and one for advanced students, are organized at the beginning of the school year. Credit is given for membership in these organizations. 1 credit.

Group lessons are offered in piano, voice, and instruments. These are small classes for the benefit of those who do not desire to register for private instruction. 1 credit; fee \$1.50.

PHYSICAL EDUCATION

The chief purpose of this course is to help develop the bodies of the students while in school. This objective is attained through supervised games and various physical exercises. The facilities of a large modern gymnasium, athletic field, and swimming pool are available for this work. Two 2-hour periods per week, $\frac{1}{2}$ credit.

POULTRY HUSBANDRY

Management of Laying Flock. Principles of general management, house construction, important commercial breeds and types, feeding and culling for egg production; common ailments and treatments. Rec. 3 hrs.; 3 credits.

Incubation and Brooding. A study of the best methods of incubation and brooding, natural and artificial, includes selection of breeds, eggs for incubation, feeding and care of chicks, how to avoid losses. Rec. 2 hrs.; 2 credits.

SCIENCE

General Science A. To acquaint the student with the many happenings of everyday life and their relation to the sciences of chemistry, physics, and biology. Rec. 3 hrs.; 3 credits.

General Science B. Continuation of General Science A. Rec. 3 hrs.; 3 credits.

Botany. A study of flowering plants, molds, mushrooms, rots or decays, and yeast. Rec. 3 hrs.; lab. 2, 2 hrs.; 5 credits.

Chemistry A. A general introductory course in chemistry treating of the fundamental principles necessary for an understanding of chemistry in its relation to agriculture and home economics. Rec. 2 hrs.; lab. 1, 2 hrs.; 3 credits; fee \$1.

Chemistry B. A continuation of Chemistry A, with a more direct application to the chemistry of plants, animals, and foods. Rec. 2 hrs.; lab. 1, 2 hrs.; 3 credits; fee \$1.

Physics. A practical course in physics as related to agricultural engineering. Covering a study of the mechanics of solids, liquids, gases, heat, sound, and light. Rec. 5 hrs.; 5 credits.

Conservation of Natural Resources. A study of the natural resources of the state, with special emphasis on the student's responsibility and opportunities for their conservation. Rec. 2 hrs.; 2 credits.

First Aid (Boys). A course in junior first aid, as outlined by the American Red Cross. The course includes artificial respiration, and diagnosis and temporary treatment of all kinds of accidents. Rec. 2 hrs.; 2 credits.

SOCIAL SCIENCE

General History A. A study of world history during the ancient and medieval periods to the French Revolution, designed to show the social and political development of men and nations during these periods. Rec. 5 hrs.; 5 credits.

General History B. A continuation of General History A, from the French Revolution to the present time, with special emphasis on the growth and development of nationalism, and democratic and liberal reforms during this period. Rec. 5 hrs.; 5 credits.

United States History A and B. A course intended to present a clear account of the colonial backgrounds of the United States with greater emphasis on the recent industrial, economic, and social development of our nation. Rec. 5 hrs.; 5 credits.

United States Government. A study of the background, organization, and functions of the national, state, and local governments. Rec. 5 hrs.; 5 credits.

Rural Sociology. A study of social backgrounds, rural social institutions, and existing rural problems. Rec. 3 hrs.; 3 credits.

Freshman Lectures. A noncredit course for beginning students, designed to aid them in adjusting themselves to the school, and to life.

SUMMER HOME PROJECTS

AGRICULTURAL PROJECTS

From 2 to 10 credits will be allowed, depending on the quantity and quality of work. A charge of 25 cents is made for the record books made up by the school. Other record books and supplies are charged for at cost. Sequence in which project work must be taken is explained in Requirements for Graduation, on page 10.

Alumni Relationships. Secure a list of all alumni and former students of W.C.S.A. living within a reasonable radius of one's home territory, contact them by letter or in person, arrange an Aggie-Alumni reunion, prepare publicity, send in three news items for *Projector*, and promote alumni relationships in every way possible. Reports required.

Beef—4-H Animal. Intended for boys in the 4-H Club projects. Fatten a baby beef steer or grow out a purebred beef heifer. Keep accurate feed and labor records of the same and submit reports as called for by the supervisor. The animal in this project must be shown at the county fair. Extra credit will be given to students reaching the State Fair or the Junior Livestock Show with their animal.

Beef Feeding. Feed at least five beef feeding cattle. They must be kept in feeding yard separate from other cattle. Submit weights and values at beginning and close of feeding period. Provide monthly feeding records and final summary reports showing financial returns.

Corn—Varietal Comparison. Plant at least one acre of one of the improved hybrids of the University of Minnesota, alongside at least a similar amount of local farm variety or another commercial hybrid. Record of labor and costs required, and reports to be submitted as called for by the supervisor.

Crops—Varietal Comparison. In this project student will make a comparative yield trial of a Minnesota recommended variety of grain with a farm variety. At least one acre or more to be grown alongside an equal amount of his home variety, and the two varieties cut and threshed separately for determining yields. Prerequisite: Cereal Crops course.

Dairy Herd Management. Student assumes care of dairy herd on his home farm for at least six months, making regular reports in regard to feeding and management and keeping accurate accounts of milk production, butterfat test, feed consumed, etc.

Farm Accounts. Keep complete records at home for a minimum of twelve months. Feed reports will be required on June 1 and September 1, and a complete book is submitted at the close of the project year.

Farm Improvement. Plan a comprehensive program of farm repair, improvement, and beautification work, such as fencing and building repairs, painting buildings, cutting and killing weeds, cleaning out orchard and woodlot, rearranging or repairing smaller outbuildings, etc. Submit plan to supervisor at beginning of the project. Keep labor and cash record and submit reports as called for by supervisor.

First Aid. Standard course in first aid is required as a prerequisite. Student will be required to plan and carry out a definite safety program for the farm and farm home. The student will also take charge of the other first aid work of the family for a six months' period. A record will be kept of all first aid work accomplished and the costs of the same.

Fruit Growing—Orchard Management or Small Fruit. Orchard project will consist of pruning, cultivating, spraying, harvesting, and preparing the orchard for winter. Small Fruit project will consist of planting, growing, harvesting, and complete

- management of a plot of strawberries, raspberries, currants, or gooseberries. Records and reports must be kept and submitted for both projects.
- Garden.** Grow a garden of at least 5,000 square feet. Prepare a garden plan and submit it to the project supervisor. Keep yield, labor, and financial record and submit reports as called for.
- Home Beautification.** Planning and planting foundation shrubs and plants around the farm home and other buildings, caring for the same during the growing season, and preparing for winter. The student makes a planting plan which is approved before the work is undertaken. At least one farm building must be completely planned for and planted.
- Community Club or Church Leadership.** The student will submit the annual program of work and meetings, as outlined by the officers and committee of the organization. Record shall be made of the part the student had in this program. Wherever possible, the student shall help with all regular meetings and help plan and participate in any special events, such as local or county picnics or other activities sponsored by the organization. This report shall be supplemented by a scrap book, including newspaper and poster advertising, snapshots, and any other illustrative material which will better picture the student's work in the organization.
- 4-H Club Leadership.** Must be a junior leader of a standard 4-H Club; must take part in county, state, or interstate events through an exhibit or as a member of a demonstration or judging team, must submit a report of all work done on the regular 4-H Club Work Leadership Report Blank, and in addition a report of regular 4-H Club project carried.
- Meteorology—Weather Data.** The project consists of keeping a complete record of temperature, precipitation, wind direction and velocity, and character of the day (cloudy, partly cloudy, clear) over a period of six months, April 1 to September 30.
- Personal Accounts.** Those boys who are working out and unable to carry the Farm Accounts project may keep records of personal expenses for a period of six months. Submit project book with evidence of saving, to indicate that at least 50 per cent of wages earned have been saved. Included in savings shall be evidences of old notes or bills paid, and clothing bought for personal use.
- Potatoes.** Grow one-half acre or more of a standard variety to be compared with one-half acre or more of one of the new varieties of potatoes developed by the University of Minnesota, such as the Warba, Sebago, or Chippewa. If possible, select and show peck sample of potatoes at county fair. Keep cost of production and labor records, and submit reports as called for.
- Poultry—Incubation and Brooding.** Course in Incubation and Brooding required as a prerequisite. In this project 200 or more chicks, or 100 poults, are brooded, fed, and raised by the student. Poultry must be kept on clean ground or screen, up to 12 weeks of age. A definite ration is fed throughout the project, and accurate feed and labor records are kept.
- Pure Seed Production.** Production in quantity of one of the newer Minnesota varieties of grain. Students secure registered seed; grow and handle the same according to the rules and regulations of the Minnesota Crop Improvement Association.
- Recreational Reading.** Student will read and report on three novels, one biography; and three short stories or three essays or three plays. Selection of readings must be from the recommended list of Home Reading by the National Council of Teachers of English, for the year in which student is advanced in school. A \$2 deposit is required for the use of the W.C.S.A. library books and payment of postage for transportation of books. If all books are returned, refund will be made except postage costs when project is completed.

- Sheep Management.** Take over the management of the flock. Ownership by student is desirable. Lambs should be creep fed for a least a month. Student should dock and castrate lambs and treat for stomach worms, and if necessary, dip sheep. Keep labor, feed, and financial records, and submit same as called for.
- Swine—Cost of Production.** Take over the management of the swine herd; practice good sanitation; keep farrowing records; earmark litters if possible (extra credit for doing so); keep accurate labor, feed, and financial records; and submit the same monthly. Final report is required at the close of the project year.
- Swine—Ton Litter or Market Litter.** For those who are enrolled in the Swine 4-H Club project, produce a ton litter, if possible, from one sow. Must be kept separate from other hogs. Keep labor, feed, and financial records, and submit same as called for.
- Swine Sanitation.** Take over the management of the entire herd. Keep farrowing records. Pigs are to be raised on clean and sanitary ground, on which pigs have not been grown the previous year. The McLean System, or a modification of it, is expected to be carried out. Keep labor, feed, and financial records and submit same monthly. Sow testing may also be carried on with this for extra credit.
- Tractor Operation.** A study of the management and operation of the tractor on the home farm, including cost of fuel and oil, repairs, etc., and complete records of work done.
- Weeds I.** Involves a study of the most noxious weeds on the home farm. Students registered for this project are required to identify and describe at least twenty-four different kinds and make a weed seed and plant collection of same.
- Weeds II.** Make a collection of forty-eight noxious weed seeds, together with the plants. If the student has already received credit for Weeds I project, the weed case from it must be submitted with the two required for this.
- Weeds III.** Select a patch of ground infested with quack grass, or some other noxious weed such as: leafy spurge, field bindweed, ox-eye daisy, French weed, or Canadian thistle. Practice cultural methods to eradicate the same. Keep a financial and labor record and submit reports as called for during the summer.
- Windbreak Planting.** Plan, plant, and care for a standard windbreak around the farmstead. Plan to be submitted to supervisor before project is started. Keep labor and cash records and submit reports as called for.
- Farm Woodwork.** Make five small articles, or two larger ones, selected from list prepared by supervisor, or build one small farm building. Keep farm tools in good condition. Submit records during the summer and a final report before August 1.

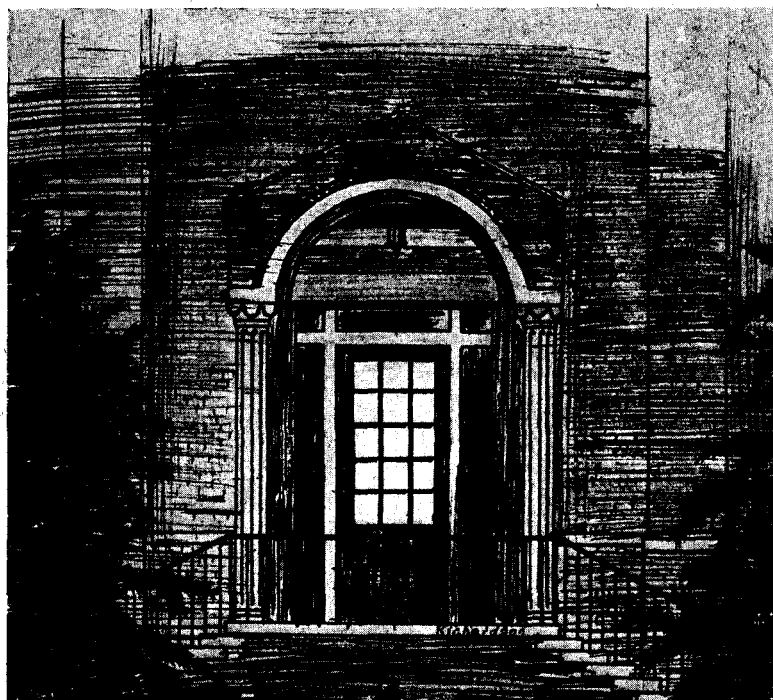
HOME ECONOMICS PROJECTS

- Baking.** Includes the baking of not less than eight bakings of yeast bread and rolls, and the baking of quick breads until a standard product is obtained with a record of time, costs, and materials. 2 credits.
- Canning Fruits and Vegetables.** The student will can not less than twelve quarts of vegetables, including two or more kinds, and not less than twelve quarts of fruit, including two or more kinds, and not less than six glasses of jelly. Records of methods, time, and costs are made a part of this project. 2 credits.
- Children's Clothing.** Consists of making a layette for a baby, or two suits or dresses for a small child. 2 credits.
- Clothing Repair.** Not less than 15 articles of clothing and household linen are to be repaired. A record is kept of time and expenses, and money saved. 1 or 2 credits.
- Foods and Cookery.** Includes the preparing of salads, salad dressing, cakes, pies, cookies, puddings, and other simple desserts. Each product is made and scored at least three times. 2 credits.

- Garment Making.** Making a dress for self or for another member of the family. A record is to be kept of the time and cost. Credit will be given according to garment made and material used. 1 to 3 credits.
- Home Furnishing.** Includes the redecorating of a room, including walls, woodwork, and furniture, making of curtains, etc. 2 or 3 credits.
- Home Management.** Includes the planning and preparation of all meals in the home for a period of two weeks. 2 or 3 credits.
- Laundering.** This project includes doing the family laundering for four weeks, dry cleaning, stain removal, etc. 1 or 2 credits.
- Make-Over.** In consultation with instructor the student will arrange to make over some garment before leaving school. After the work is completed, it is to be approved by the instructor before credit is given. 2 credits.
- Personal Accounts.** Records are kept of personal expenses for a period of six months. Bankbook or other evidence of saving should indicate that at least 50 per cent of earnings have been saved. Payment of old bills and notes and clothing bought shall be included as savings. Credit will be based on merit of record submitted.
- Working Out.** In this project, with the approval of her employer, the girl keeps a careful and complete record of her daily tasks. 2 to 4 credits.

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North Central School of Agriculture
Grand Rapids, Minnesota



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FACULTY

Walter C. Coffey, M.S., LL.D., President of the University
Clyde H. Bailey, Ph.D., Dean and Director of the Department of Agriculture

AT GRAND RAPIDS

ADMINISTRATION

Donald L. Dailey, B.S., Superintendent
Carmen L. Delli Quadri, M.A., Preceptor and Instructor
Mary Kulstad, Registrar, Librarian, and Instructor
*Kenneth Miller, M.S., Preceptor and Instructor
Marie O. Mollins, Instructor and Dining Hall Matron
Harold W. Stuneck, Accountant
Eva Mae Voigt, Secretary

AGRICULTURAL ENGINEERING

Arthur F. Dahlberg, M.S., Farm Mechanics and Engineering
J. Byron Faricy, Farm Mechanics

AGRONOMY AND AGRICULTURAL ECONOMICS

Clement H. Griffith, M.Ph., Agronomy and Soils
Donald L. Dailey, B.S., Farm Management and Genetics

ANIMAL HUSBANDRY

*Kenneth Miller, M.S., Animal and Dairy Husbandry
Donald L. Dailey, B.S., Animal and Dairy Husbandry
Arthur F. Dahlberg, M.S., Poultry

HORTICULTURE AND ENTOMOLOGY

Alfred L. Richardson, M.S., Horticulture and Entomology
Clement H. Griffith, M.Ph., Entomology

ASSOCIATED SUBJECTS

Arthur F. Dahlberg, M.S., Sciences
Carmen L. Delli Quadri, M.A., Political Science and Athletics
Mary Kulstad, Mathematics
Ruth L. Metzger, B.S., Music
Marie O. Mollins, English
Alfred L. Richardson, M.S., Speech
_____, Commercial Subjects

* On military leave of absence.

GENERAL INFORMATION

PURPOSE

The North Central School of Agriculture was established in 1926 for the purpose of giving farm boys of northeastern Minnesota an opportunity to prepare themselves for the occupation of farming and closely related occupations for which a basic training in the field of agriculture is essential. Besides the technical agricultural training, a broad general education is provided to enable the students better to fit themselves for good citizenship.

LOCATION

The North Central School of Agriculture is located at the Experiment Station, one and one-half miles east of Grand Rapids, Minnesota, on the paved State Highway No. 169. Busses from the Twin Cities and from the Mesaba Range stop at the school when requested.

ADMISSION

The school will admit any young man of good moral character, who has completed the eighth grade, and who desires technical training in agriculture. In special cases those who have not completed eighth grade work will be admitted. Mature young men who have been out of school for two or more years and desire special training in agriculture will be admitted. High school courses equivalent to courses offered in the School of Agriculture will receive the same credit as those offered in the school. High school graduates may register for any of the courses offered, and by properly planning their program, may become graduates of the School of Agriculture in much less time than the



Administration Building

three years required for the regular student. Many high school graduates come for one year of specialized vocational training. Students should correspond with the superintendent before coming to the school to make the necessary preliminary arrangements for registration.

TIME OF OPENING

The time of opening the fall term is late enough so that students may help with the fall work on the farm, and the winter term closes early enough to permit them to return to the farm for the rush of spring work. The fall term opens in October. The winter term opens in January and closes the last of March.

THREE-YEAR COURSE

The course of study offered covers a wide range of subjects, largely agricultural, and requires three school years for completion. The methods of instruction tend to educate the students toward the farm instead of away from it and to develop in them a love for farm life by showing its possibilities.

REQUIREMENTS FOR GRADUATION FROM THREE-YEAR COURSE

1. Completion of the prescribed course of study, including all required work and enough electives to make a total of 160 credit hours.
2. Two summers of supervised home project work. Of the 160 credits necessary for graduation 6 must be in home project work.
3. An honorable standing in deportment.
4. Payment of all school accounts.

ADVANCED COURSE

A student after completion of the regular three-year course, may desire to prepare himself for entrance to the University or another higher institution. This preparation is provided by offering an additional school year, in which time the student will be required to cover a prescribed amount of academic work. He may choose, from the elective lists, subjects that he could not obtain during his first three sessions, such as more specialized work in animal husbandry, horticulture, farm engineering, commercial subjects, and academic work. Graduates of the Advanced Course will be admitted to the University of Minnesota and to the state teachers colleges.

SPECIAL COURSE

High school graduates receive a certificate for one year of work at the School of Agriculture. They are required to take 36 credits of agricultural work and a total of 50 credits of classroom work for the entire year. Students shall also complete 5 credits of project work.

HOME PROJECT WORK

The home project presents an opportunity for students to demonstrate their ability to put into practice some of the approved farm practices taught in the classroom or demonstrated at the station. It may be performed on the home farm or such location as approved by the project supervisor.

Project plans shall be submitted by each student to the project supervisor by the end of the first semester for the next summer's work, using the project analysis form. In making these plans students should consult the instructors in the field of their project for suggestions.

Inspections and consultations on his project activities will be given each student during the summer by the project supervisor.

Students will report the progress being made in their project work, by mail, to the supervisor during the months of April, June, and August.

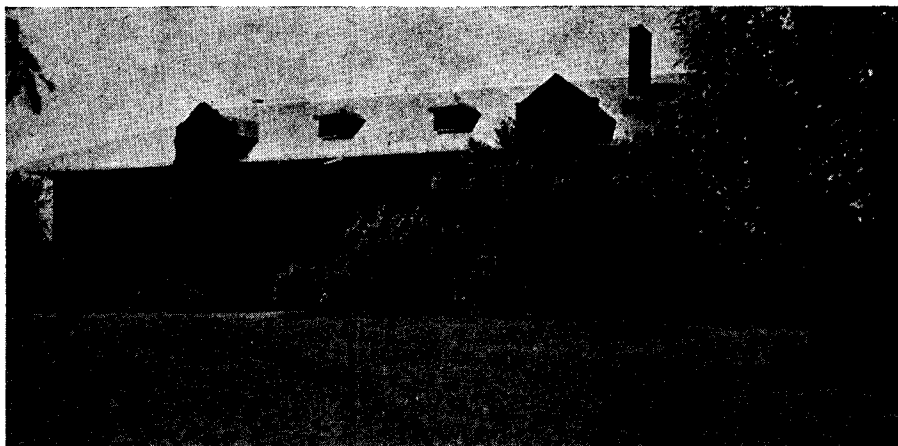
A summary and final accounting of the work accomplished together with a story of the project shall be submitted for each project upon satisfactory completion of the work, or, by the end of the first term of the following school year.

Credit for project work will be allowed as follows: three credits of project work count as one unit.

Two units are necessary for graduation from the three-year course, and three units for the four-year course. Three units of project work are included in the entrance requirements of the University of Minnesota.

ROOMS IN DORMITORY

The rooms are cheerful and modern. Each room is furnished with single beds, chiffonier, table, chairs, and study lamp. Students planning to attend the School of Agriculture should reserve rooms in advance. Write early, asking the registrar to reserve a room in the dormitory.



Dormitory and Dining Hall

HOME LIFE IN THE DORMITORY

The dormitory life of the students while attending the School of Agriculture is subject to supervision. The home life of each student is carefully guarded, and everything possible is done to promote a healthful and moral atmosphere. The use of profanity or tobacco in the dormitory is strictly forbidden. Any student using intoxicating liquors in any form will be expelled from school.

The supervisors have charge of students in the dormitory and regulations enforced are for the good of all.

From 8:15 a.m. to 4:30 p.m. students are busy with their school work. From 4:30 to 6:00 p.m. there is a recreation period in which the student's time is at his own disposal. After 7:30 p.m. students are expected to be in their own rooms and to be quiet so that all may study undisturbed. Students

may leave the campus in the evening only upon the permission of the supervisor.

Students are required to be correct in their habits, and to observe pleasantly all directions for their government. Anyone not in accord with these restrictions and not willing to lend a hand toward strong moral growth should not come to the school. Infraction of the dormitory rules may be sufficient cause for dismissal from school.

USE OF AUTOMOBILES BY STUDENTS

Experience has shown that ownership or possession of an automobile by a student is usually detrimental to school work. Therefore, a regulation is in force prohibiting students from having automobiles in their possession while attending the school. There are a few cases where an automobile is the only means of transportation to and from school, and in such instances an exception will be made, provided the student's parent or guardian makes arrangements with the superintendent prior to the time the student brings the car to school. Such automobiles will be kept in a designated parking lot during the time they are not used, and all keys to the same are to be left with the superintendent. In accepting custody of the automobile the superintendent and the University assume no responsibility for its safekeeping.

WHAT TO BRING

Each student should come provided with comforters or blankets, sheets, pillow cases, towels, comb, brushes, tumbler, pajamas, and bedroom slippers. Curtains and dresser scarfs may be brought if desired. All students will need tennis or gymnasium shoes.

SCHOOL COSTS

The necessary expenses for the year are approximately \$135. This amount does not include traveling and personal expenses.

The chief costs of attendance are for board and room. Board will cost \$4.25 per week, and room will cost \$1.25 per week (including flat laundry). Fees other than board and room cost approximately \$25 to \$35 per year for those students who are ineligible for state tuition aid. (See paragraphs on Tuition Aid and Transportation Aid.)

The total cost for board and room is approximately \$55 per term or \$110 for the school year.

On entering the school each term, the student will need to bring sufficient money to pay for one month's board and room, fees if ineligible for tuition aid, and make a breakage deposit of \$5. *The board and room account is payable the first of each month in advance.* Fees are for the entire term; after the first month, the only expenses are for board and room.

NOTE—No deduction is made for board for any absence of less than five days; half rates for board will be charged after five days' absence if arrangements are made with dining hall manager, accountant, or registrar before leaving. No room refunds will be made for any period less than one month except in cancelled registrations.

EXPENSES

Fees are required of all students (see paragraph on Tuition Aid in this bulletin).

Tuition fee, per term	
Resident of Minnesota	\$3.00
Nonresident	6.00
Deposit as guarantee of proper treatment of school property (required of all), per year	5.00

Health fee (required of all), per term	1.50
Book rent (required of all), per term	1.00
Student privilege tickets for all school functions, athletic contests, games, and entertainments (required of all), per term	3.50
Board, per week (dormitory residents) (price subject to change)	4.25
Room, per week—including flat laundry (dormitory residents) (price subject to change)	1.25

NOTE—Special fees in laboratory courses are as follows: carpentry, engineering, farm mechanics, chemistry, \$1 each per term and crop studies 50 cents per term. A rental fee of \$1 per month is charged for the use of typewriters.

CANCELLATION OF REGISTRATION

No student may drop a subject for which he is registered without the special permission of the registrar.

If a student is below grade in a subject at the time of cancellation, his record in that subject will be entered as a failure.

Changes in registration must be made before the end of the second week of school. All such changes must be on the proper form, which the student may obtain from the registrar. All changes in registration must be approved by the registrar.

Where the cancellation of registration is necessary before the close of the term, tuition fees will be refunded as follows:

Period of Attendance	Percentage of Deduction	Percentage of Refund
None	None	100
Two days to one week	10	90
One week to two weeks	20	80
Two weeks to three weeks	30	70
Three weeks to four weeks	40	60
Four weeks to five weeks	50	50
Five weeks to six weeks	60	40

HEALTH SERVICE

The health service fee provides for physical examinations for all students, doctor's advice as to anything that would correct present health conditions, and for sick calls that are made to the school dormitory. It does not provide for nurse's care in case of serious sickness or extra costs caused by epidemics, or hospital care, in case the student is taken to the hospital. These must be paid for by the student receiving the service.

ASSEMBLY PERIOD

An assembly period is held at least once every week throughout the school year. Students are required to attend these assembly exercises. The school secures prominent speakers to address the student body at these exercises. The assembly period is also used as a forum for discussion of the many questions and announcements of importance to the student body.

SUNDAY SERVICES

A short, non-denominational devotional service is offered on Sunday morning immediately following breakfast, with speakers representing various denominations. Attendance at these services is entirely voluntary.



Orchestra

MUSICAL ORGANIZATIONS

All students wishing to take lessons on common musical instruments will receive such lessons free of charge. A glee club and chorus are organized each year.

ATHLETICS

Athletics has played no small part in the life of the students at the North Central School of Agriculture. A high standard of eligibility is maintained and annual contests in basketball, boxing, wrestling, and track are scheduled with teams representing the other schools of agriculture and with surrounding high schools. Minor sports provide additional recreation for those who are interested.

ELIGIBILITY FOR CONTESTS

The following rules will govern eligibility for all interscholastic games:

1. A student must be enrolled in the school not less than one week before the contest, or from the beginning of the term.
2. He must be doing passing work in all required subjects.
3. He must carry and do passing work in 25 hours of work during each quarter unless he is a senior in his last quarter and does not need that amount to graduate.

STATE AID

Eighth grade graduates, under twenty-one years of age, who live in school districts which do not offer four years of accredited high school instruction may attend the schools of agriculture with necessary tuition, laboratory, and equipment fees (except breakage deposit) paid from state funds.

A student who is eligible for tuition exemption must secure a tuition certificate from the county superintendent of schools of the county in which the student graduated from the eighth grade. This certificate must be presented at the time of registration.



Basketball Team

Students who do not qualify for tuition exemption are those who have not completed the eighth grade or who are high school graduates; who are 21 years of age or older; who reside in accredited high school districts; or who reside outside of the state of Minnesota.

TRANSPORTATION AID

The 1941 Minnesota Legislature made students of the schools of agriculture eligible for transportation aid on the same basis as students attending high schools. The granting of transportation aid rests entirely with the local school board and parents should make application for this aid if it is desired.

SCHOLARSHIP AND LOAN FUNDS

The North Central School of Agriculture considers itself very fortunate in being able to present the following loan fund provisions. The donors have specified the purposes for which each may be used. The general purposes, however, are to enable the school to reach a large number, to provide the means of encouraging many to acquire the training which the school offers, and to stimulate greater effort in school work.

For further details regarding these loan funds, write to Superintendent D. L. Dailey, North Central School of Agriculture, Grand Rapids, Minnesota.

GRAND RAPIDS COMMERCIAL CLUB LOAN FUND

The Commercial Club of Grand Rapids has created a revolving loan fund to aid students at the North Central School of Agriculture.

CALEB DORR CASH SCHOLARSHIP PRIZES

By a decision made in April, 1922, by the Board of Regents of the University of Minnesota, a part of the Dorr fund is now made available to the schools of agriculture. This fund consists of \$50,000 willed by the late Caleb Dorr, of

Minneapolis, the income of which will be used to promote scholarship and student activity records. Further information regarding this fund as it applies to the North Central School of Agriculture may be obtained by writing to the superintendent.

WOMAN'S CLUB LOAN FUND

This fund was started in 1933 by the Grand Rapids Woman's Club to aid needy students at the North Central School of Agriculture.

CROP JUDGING TEAM LOAN FUND

This fund was created by the grain judging team from the North Central School of Agriculture that won first place at the World's Grain Judging Contest at Regina, Canada, in July, 1933. Part of the prize money that was won was donated to establish this fund to aid needy students in attending the North Central School of Agriculture.

LUDDEN TRUST FUND

This fund may be used by students of the North Central School of Agriculture in accordance with the action of the Board of Regents.

STAFF AND EMPLOYEES SCHOOL OF AGRICULTURE LOAN FUND

This fund, created by the staff and employees of the schools of agriculture, is available for student use in accordance with the action of the Board of Regents, June 19, 1933.

R. L. DONOVAN LIONS CLUB SCHOLARSHIP FUND

The Lions Club of Grand Rapids has created a scholarship fund in memory of R. L. Donovan, former superintendent of the North Central School of Agriculture and member of this club. This fund is to be made available on either a loan or grant basis to needy and worthy students.

SEARS-ROEBUCK SCHOLARSHIPS

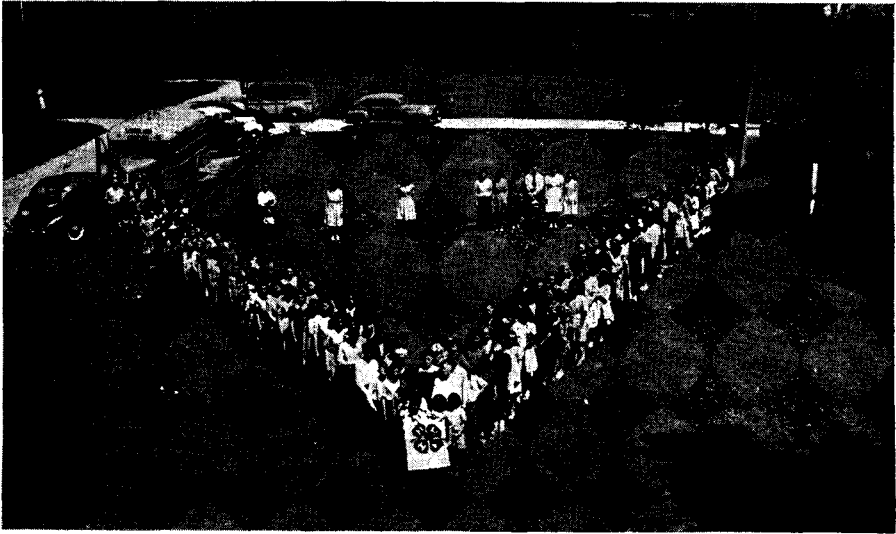
Several \$50 scholarships are assigned to the North Central School of Agriculture by Sears, Roebuck and Company. These scholarships are awarded on the basis of need, scholarship, and citizenship. The money is an outright grant to the student.

ROBERT WHEELOCK THWING SCHOLARSHIP FUND

In 1937 a scholarship fund was established by Judge and Mrs. A. L. Thwing of Grand Rapids in memory of their son, Robert. The principal of this fund now amounts to \$240 and is available for loans to needy and worthy students.

4-H CLUB WEEK

The annual 4-H Club Week, which is usually held during the month of June each year, is open to boys and girls from twelve to twenty years of age. With the exception of a small fee for board, there is no expense connected



4-H Club Camp

with the course. The course aims to deepen the interest of boys and girls in life on the farm. Special emphasis is placed on boys' and girls' club work. Instruction is given for the planning and carrying out of work in such projects and contests as gardening, potato growing, sheep, pig, calf, and chicken raising, cooking, sewing, and canning. Illustrated lectures, moving pictures of educational value, games, singing, and excursions add interest and pleasure to the course.

GRAIN, LIVESTOCK, AND FLOWER CONTESTS

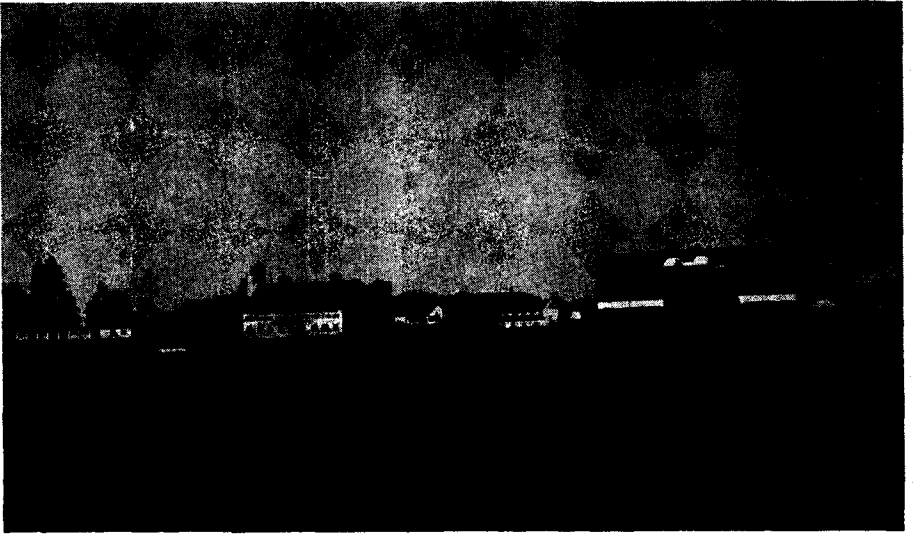
These contests, which have become an annual event, are open to farmers' clubs, 4-H Clubs, and high schools. The instructor at the head of each department is in charge and judges are secured from the University of Minnesota. In addition to the regular grain and livestock judging contest, there is a tree and flower identification contest for women.

WOMEN'S CAMP

The annual Women's Camp is held at the North Central School during the month of June each year, for three or four days, to provide instruction and recreation for homemakers. Instruction in the form of demonstrations are offered in homemaking, community building, child training, music, and recreation.

NORTH CENTRAL QUARTERLY

The *North Central Quarterly* is published by the school faculty. It serves as a medium by which former students and alumni are kept in touch with one another and with the school. It also contains much useful information regarding farm problems in horticulture, dairying, poultry, agronomy, and other information that is of much interest to the average farmer.



View Showing Barns

EXPERIMENT STATION

The North Central School and Station is now conducting extensive experiments in agronomy, soils, horticulture, forestry, dairy and animal husbandry, poultry husbandry, apiary, and agricultural engineering.

SCHOOL FARM

The farm comprises 457 acres, and furnishes an extensive laboratory for the work of the school. Over 100 acres are in forest reserve, so designated by the Board of Regents; 250 acres are included in crop lands and grounds; the rest is stump-land pasture not suited for crop purposes. Information concerning the methods employed on the farm is always available to the students. The classroom work is supplemented with actual practice either in the field or with crops grown on the farm.

STATION FLOCKS AND HERDS

The school now maintains an abundance of livestock, all of which may be used for student work in animal husbandry. Purebred Guernsey cattle, numerous breeds and crosses of sheep, Percheron horses, Minnesota No. 1 hogs, and S. C. White Leghorn chickens are maintained for station and school purposes. Excellent opportunities are thus provided for students to study intelligently the various courses in animal husbandry.

LIBRARY

The school is equipped with a good reference library to meet the needs of the various departments.



School and Station Projects

COURSES OF STUDY

THREE-YEAR COURSE

FRESHMAN YEAR

Fall Term REQUIRED	Credits	Winter Term REQUIRED	Credits
English Ia	5	English Ib	5
Animal Husbandry I	5	Dairy Breeds and Judging	3
Livestock Breeds and Judging	3	Cereal Crops	5
Poultry I	3	Industrial Geography	5
Plant Life	5	Poultry II	3
Farm Arithmetic	5	Carpentry I	2
Physical Training	1	Physical Training	1
Health Education	1	Genetics	3
Total	28	Total	27
ELECTIVES		ELECTIVES	
Glee Club	1	Glee Club	1
Spelling and Penmanship	3	Mechanical Drawing	2
Typewriting I	5	Typewriting I	5
Farm Shop	2	Typewriting II	5
Instrumental Music	1	Instrumental Music	1
Blacksmithing	2	Spelling and Penmanship	3
		Farm Motors	3

JUNIOR YEAR

Fall Term REQUIRED	Credits	Winter Term REQUIRED	Credits
English IIa	5	English IIb	5
Chemistry or Physics*	5	Fruit and Vegetable Crops	5
Corn and Grain Judging	3	Feeds and Feeding	5
Forage Crops	5	Speech II	3
Speech I	3	Physics or Chemistry	5
Farm Forestry	3	Physical Training	1
Physical Training	1	Total	24
Total	25	ELECTIVES	
ELECTIVES		Mechanical Drawing	2
Farm Shop	2	Farm Motors	3
Glee Club	1	Glee Club	1
Advanced Livestock Judging	3	Bookkeeping II	5
Bookkeeping I†	5	Typewriting I	5
Typewriting I	5	Typewriting II	5
Typewriting II	5	Instrumental Music	1
Instrumental Music	1	Carpentry II	2
Blacksmithing	2	Farm Machinery	2

* Chemistry and Physics will be offered alternate years.

† For credit in bookkeeping, students must complete both Bookkeeping I and Bookkeeping II.

COURSES OF STUDY

15

SENIOR YEAR

Fall Term		Winter Term	
REQUIRED	Credits	REQUIRED	Credits
English IIIa	5	English IIIb	5
United States History	5	American Government	5
Soils	3	Farm Management	5
Farm Accounts	2	Veterinary Studies I, II	5
Agricultural Economics	3	Dairy Management	3
Veterinary Studies I, II	5	American Problems	3
Physical Training	1	Physical Training	1
Total	24	Total	27
ELECTIVES		ELECTIVES	
Farm Shop	2	Farm Machinery	2
Glee Club	1	Glee Club	1
Livestock Management and Marketing	5	Insects and Bees	3
Bookkeeping I	5	Ornamental Planting	2
Typewriting I	5	Bookkeeping II	5
Typewriting II	5	Typewriting I	5
Instrumental Music	1	Typewriting II	5
Advanced Livestock Judging	3	Instrumental Music	1
Advanced Grain Judging	3	Carpentry II	2
Potato Production	3		
Pure Seed Production	2		

ADVANCED COURSE (Fourth Year)

Fall Term		Winter Term	
REQUIRED	Credits	REQUIRED	Credits
English IVa	5	English IVb	5
Elementary Algebra I	5	Elementary Algebra II	5
Geometry I	5	Geometry II	5
Livestock Management and Marketing	5	Animal Breeding	5
Physical Training	1	Physical Training	1
Land Use and Development	3		
Total	24	Total	21
ELECTIVES		ELECTIVES	
Glee Club	1	Glee Club	1
Bookkeeping I	5	Bookkeeping II	5
Typewriting I	5	Typewriting I	5
Typewriting II	5	Typewriting II	5
Advanced Livestock Judging	3	Insects and Bees	3
Advanced Grain Judging	3	Ornamental Planting	2
Potato Production	3	Advanced Poultry	3
Pure Seed Production	2	Carpentry II	2
Instrumental Music	1	Instrumental Music	1

SPECIAL COURSES

	Credits
Agricultural Subjects	36
Electives	14
Project Work	5
Total for year	55

§ High school graduates receive a certificate after one year of work in the Special Course.

DESCRIPTION OF COURSES

AGRONOMY AND SOILS

- A. Cereal Crops. A study of the principal cereal crops, classes, and varieties adapted to northern Minnesota, production, seed selection, seed treatment, control of disease, soil and cultural practices, and harvesting.
- B. Forage Crops. A study of leguminous crops, grasses for pastures and meadows, annual forage crops, root and tuber crops grown for livestock, seed selection, cultural requirements and their importance to the farm. Includes meadow and pasture management.
- C.† Corn and Grain Judging. Score card practice, grading and judging, identification of farm crop plants, seeds and weed seeds, diseases and weed plants, with the object of making the student proficient in judging and identifying good and pure seed.
- D. Pure Seed Production. A study of the methods of breeding and growing purebred crop seeds. The course includes certification and seed registration, pure seed and weed laws.
- E. Soils. Soil formation and classification with particular attention to those of this territory. Factors influencing the fertility of soil and its maintenance, including texture, tilth, moisture, air tilling, organic matter, soil organisms, acidity, plant food, crop rotation, soil erosion, farm manures, commercial fertilizers, and types of farming.
- F. Advanced Grain Judging. Primarily for those interested in becoming more proficient in grain judging and identification of grains and grasses.
- G. Genetics. An elementary course teaching the fundamental laws of heredity. Students become familiar with terminology and with the practical application of inheritance as relates to farm crops, fruits, vegetables, poultry, and livestock.

AGRICULTURAL ECONOMICS AND FARM MANAGEMENT

- A. Farm Management. A study of the operation of the farm as an organized business and its relationship to farming as a whole. Consideration is given to types of farming, combination of enterprises, field and homestead arrangement, crop rotation, soil management, labor with livestock, equipment and improvements, factors affecting cost of production, land tenure.
- B. Farm Accounts. A study of farm accounts and their relationship to improving the farm organization and operation. The use of farm account books in analyzing and improving the farm business.
- C. Agricultural Economics. A study of elementary economics as applied to agriculture with emphasis on the laws of supply and demand and factors that determine farm prices. Money, banking and farm finance are also studied.
- D. Land Use and Development. A study of land zoning and classification as applied to north central and northeastern Minnesota. A brief survey of land economics with particular emphasis on land values. The costs of clearing land by different methods is reviewed. Prerequisites, Economics and Soils.

HORTICULTURE AND ENTOMOLOGY

- A. Plant Life. The study of the names and functions of the different parts of a flowering plant. Elementary botany.
- B. Ornamental Planting. A study of the most common plants used in home beautification—trees, shrubs, annual and perennial flowers; arrangements and propagation, planning the grounds, making lawns.

† A fee of 50 cents per term is charged for this course.

- C. **Fruit and Vegetable Crops.** (1) *Fruit Growing*—Importance of farm orchard and small-fruit gardens is emphasized. Course consists of a study of orchard soils, planting and cultural methods, propagation, pruning, spraying, harvesting, marketing, selection of varieties of native and hardy fruits. (2) *Vegetable Gardening*—The value of the home vegetable garden, preparation of the ground, and selection of plants and seeds are given attention. Includes tillage, rotation, transplanting, preparation and care of hotbeds, and insects dangerous to the garden.
- D. **Farm Forestry.** Identification of native trees. Study of growing conditions and habits of growth; woodlots; selection of suitable varieties, planting, and care. Planting and conserving forests as a crop.
- E. **Insects and Bees.** An elementary study of the anatomy and life cycles of a number of the more important kinds of insects. Life history and habits of bees, their management and equipment.
- F. **Potato Production.** A study of the potato varieties adapted to northern Minnesota. The culture, improvement, handling, storage, disease and insect control, and marketing of the potato crop.

AGRICULTURAL ENGINEERING

- A. ‡ **Blacksmithing.** Instruction and shop practice in the common forge operations such as shaping, bending and welding, and tempering of tools that can be done on the farm with iron and steel.
- B. ‡ **Carpentry I.** Instruction and shop practice in tool sharpening, painting, and finishing, and the proper use of carpentry tools on the farm.
- C. ‡ **Carpentry II.** Instruction and practice in the construction of farm structures and equipment including stair and rafter cutting, framing, foundations, concrete work, and selection of building materials.
- D. ‡ **Farm Motors.** Principles of construction and operation of gasoline engines with practice on stationary farm motors. Care and use of electric motors in rural electrification, and laboratory study of the fundamentals of electricity.
- E. ‡ **Farm Shop.** Practice in rope work, soldering, belt lacing, pipe fitting, use of farm level, electric wiring, leather stitching and harness repair.
- F. **Farm Machinery.** Selection, use, care, and operation of farm machinery including plows, disk harrows, cultivators, binders, mowers, sweep rakes, etc.
- G. **Mechanical Drawing.** The use of mechanical drawing instruments in drawing designs for farm structures and equipment. Map and blueprint reading.

DAIRY AND ANIMAL HUSBANDRY

- A. **Animal Husbandry.** A study of the general field of animal husbandry and the importance of farm animals and their products—milk, meat, wool, hides, and leather are studied with special emphasis on the importance of quality production and correct handling for maximum returns.
- B. **Dairy Breeds and Judging.** Various breeds for dairy purposes are studied. Comparative judging. Score cards.
- C. **Livestock Breeds and Judging.** Breeds of beef cattle, hogs, horses, and sheep are discussed as to origin, development, characteristics, adaptation, and economic importance. Score card judging.
- D. **Feeds and Feeding.** General composition of the animal body, composition and digestibility of feeds, feeding standards, methods of feeding.

‡ A fee of \$1 per term is charged for this course.

- E. Dairy Management. Feeding and general management of dairy herd; value of purebred sires; study of records and pedigrees, and method of registration; problems of sanitation and disease.
- F. Livestock Management and Marketing. Study of market classes and grades, market reports, management of livestock, butchering, meat cutting.
- G. Animal Breeding. Theory and practice of animal breeding, including variation, heredity, selection, effect of purebred animals on improving types of stock and pedigrees.
- H. Advanced Livestock Judging. Continuation of first year judging.
- I. Veterinary Studies I. A study of the importance of animal health to a successful livestock enterprise. Includes a study of the anatomy and normal functioning of the animal body. A brief review is made of bacteriology and immunization methods.
- J. Veterinary Studies II. A review of the more common diseases of farm animals and home treatment for common ailments. Parasite identification and control, castration, docking, dehorning, and delivery of young.

POULTRY HUSBANDRY

- A. Poultry I. A study of the best approved farm practices for profitable poultry and egg production for northeastern Minnesota, including housing and equipment, breeds and varieties of chickens and other fowl, culling, feeding, nutrition, and anatomy of the fowl.
- B. Poultry II. Principles and practices of breeding and selection; the National Poultry Improvement plan; incubation, brooding and rearing; exhibiting and judging for standard requirements and selection for production qualities; marketing live and dressed poultry; egg marketing; sanitation (for diseases of poultry see Veterinary Studies); caponizing; keeping flock records; and the Minnesota plan for turkey raising.
- C. Advanced Poultry. A special course to study current problems of poultry research for the poultry breeder, the hatcheryman, and the poultry industry in general.

ENGLISH

- A. English Ia. Review of parts of speech. Oral and written themes required. An appreciation of good literature is encouraged by the reading of the simpler classics. Book reviews are given.
- B. English Ib. Continuation of English Ia. Sentence and paragraph structure. Letter writing. Theme work is continued. Most common rules of punctuation.
- C. English IIa. More advanced theme writing and oral reports. Book reports, oral and written standard selections of interest are read. Punctuation is studied extensively.
- D. English IIb. A continuation of English IIa. The business letter is stressed. Continuation of themes, using outlines in both oral and written reports.
- E. English IIIa. Advanced work in written composition of descriptive type. Advanced classics and extensive outside reading. History of American literature is also taken up in this year with readings from American authors. Special emphasis is placed on contemporary American writers.
- F. English IIIb. Study of American classics continued. Composition work of narrative and argumentative type. Simple newspaper writing. Thoro review of common rhetorical principles.
- G. English IVa. History of English literature with readings from masterpieces. Theme work continued.
- H. English IVb. Continuation of English IVa.

- I. Speech I, II. The purpose of this course is to develop skill and experience in speaking before the public. Orations and topics are used for drill in deportment and expression. Study of the principles of argumentation and methods of conducting public meetings by parliamentary procedure. Considerable attention is given to play production and dramatics.
- J. Spelling and Penmanship. This course is available to students who have not received a spelling credit in the grades. Its aim is to equip the student with a workable vocabulary for ordinary needs. Drills are given on commonly misspelled words. Drills and individual instruction in penmanship.

SOCIAL SCIENCES

- A. Industrial Geography. A review of physical and political geography of the world with a study of the principal commodities in commerce, and conditions, natural and otherwise, that affect their production. Map studies stressed.
- B. United States History. A study of the early discovery and colonization of the continent leading to the formation of the Union, the growth of the nation, and recent problems.
- C. American Government. Legislative, judicial, and executive departments and their functions. School districts, townships, county, state, and national government with special stress placed on Minnesota government.
- D. American Problems. A study of social, economic, and political problems confronting the citizens of our country; their history, causes, and effect on everyday life.

MATHEMATICS

- A. Farm Arithmetic. Fundamentals of arithmetic; mastery of tables; important and useful formulas; fractions; decimals; linear, square, and cubic measure; lumber and building construction problems, silos, etc.; percentage; interest, insurance, etc. Application of knowledge to farm problems with a view to using practical short cuts.
- B. Elementary Algebra I. Fundamental operations; properties of algebraic numbers. Identities and equations of condition, parentheses in algebra, factoring.
- C. Elementary Algebra II. Factoring, continued; fractions; linear systems; square root; quadratic equations; radicals.
- D. Geometry I. Preparation for the proofs, formal proofs, triangles, quadrilaterals, polygons, concurrent lines. Summary of various methods of proof.
- E. Geometry II. The circle—measurement of arcs and angles, inequalities, loci. Proportion, measurement, similar figures, areas of polygons.

BUSINESS TRAINING

- A. Bookkeeping I. The principles of double-entry bookkeeping, as far as controlling accounts, are illustrated by exercises and sets. The use of ordinary business papers is shown with the principles of banking and transportation.
- B. Bookkeeping II. Continuation of Bookkeeping I with more accruals, trade discounts, consignments, etc. Required before credit is given for Bookkeeping I.
- C.‡ Typewriting I. Proper use of the machine; accuracy in touch typing through exercises. Simple business letters are introduced.
- D.‡ Typewriting II. Continuation of Typewriting I consisting of business letters, tabulating, and executing legal documents.

‡ A fee of \$1 per month is charged for this course.

PHYSICAL SCIENCES

A two-term course in Physics is alternated with a two-term course in Chemistry every other year. Laboratory practice is provided to augment class recitations.

- A.†† Chemistry I and II. An elementary course in the fundamental principles of chemistry and the application of chemistry to agriculture.
- B. Physics I and II. A study of familiar phenomena of physics occurring in everyday life and fundamental principles involved, with illustrative and explanatory exercises for their interpretation and practical application.

MUSIC

- A. Glee Club. All students may apply for admission to the Glee Club. Participation depends upon ability to read music and sing part-songs within the voice range.
- B. Chorus. All students sing in the chorus regardless of training.
- C. Orchestra. The common orchestral instruments are used in beginning orchestra instruction.
- D. Individual Training. Lessons are provided in voice, piano, and the common orchestral and band instruments.

HEALTH EDUCATION

- A. Health and Human Welfare. Presenting the fundamentals as well as more advanced information on anatomy, physiology, and hygiene. A course designed to meet in a practical way the everyday health problems of youth. For students in residence the first year.
- B. First Aid.

AGRICULTURAL PROJECTS

PRODUCTION PROJECTS

- A1. Dairy Herd Management. Student assumes care of dairy herd on his home farm for at least six months, making regular reports in regard to feeding and management, and keeping accurate accounts of milk production, butterfat tests, feed consumed, etc. 3 credits.
- A2. Swine Management. Management and feeding of the home herd. Farrowing records, feed records, and cost of production figures are made a part of this project. Opening and closing inventories and a financial statement showing total costs and receipts are required. 3 credits.
- A3. Lamb Production. Ten or more ewes are required for this project. Lambing records are kept, the lambs are earmarked and dates of birth recorded. Feed records are kept and the lambs weighed when averaging 135 days old. A student is to show a pen of at least three lambs at his county fair. 3 credits.
- A4. Brooding and Rearing Chicks. In this project 100 or more baby chicks that are hatched on the home farm, custom-hatched, or purchased from a hatchery, are brooded and reared. Recommended rations are fed, records kept, and birds marketed or used as replacements or additions to the home flock. A student is to exhibit individual birds or a young pen at his county fair. 3 credits.

†† A fee of \$1 per term is charged for these courses.

- A5. Management of Laying Flock. The student takes full charge of the management of the producing and breeding flock of at least 50 hens on his farm. Improvements of management, sanitation, and houses are made. An approved ration is fed, feed and production records are kept for one year, flock tested for pullorum disease, and R.O.P. breeding males used as flock sires. 3 credits.
- A6. Turkey Production. Purchase 100 day-old poults from recommended source, brood and rear in accordance with the Minnesota plan. Test flock for pullorum. Report weights of toms and hens produced, cost of production, and total value of turkeys produced. 3 credits.
- A7. Potato Production. Growing an acre or more of a standard variety. The work includes selection and treatment of seed, control of diseases, cultural practices, costs of production, and financial returns. 3 credits.
- A8. Pure Seed Production. Consists of raising not less than an acre of certified seed of any of the recommended grain varieties. Cost of production records are kept. 3 credits.
- A9. Legume Seed Production. The production of certified seed from at least an acre of any of the recommended varieties of legumes. Cost of production records are kept. 3 credits.
- A10. Establishing a Legume Crop. Consists of selections of a recommended variety of seed, inoculation of seed, seedbed preparation, and the establishment of a thrifty stand on at least one acre. Cost of production and yield records are kept. 3 credits.
- A11. Grain Production. Consists of the selection of a recommended variety of grain, the treatment of the seed for disease control, seedbed preparation for disease control, seedbed preparation and record of cost of production and yield. 3 credits.
- A12. Succotash Production. Consists of the preparation of six different combinations of adapted feed grains and legumes, planting the mixtures in plots or in replicated plots, and making a report of the comparative yield obtained. 3 credits.
- A13. Home Beautification. Planning and planting foundation shrubs and plants around the farm home and other buildings, caring for the same during the growing season, and preparing for winter. The student makes a planting plan which is approved before work is undertaken. 3 credits.
- A14. Beekeeping. The student takes charge of an apiary of not less than three hives. Care, management, and production records are kept. 3 credits.
- A15. Orchard and Small Fruits. Care for and record data on a fruit plantation of not less than one twentieth of an acre. Records should show the cost of labor, plants, fertilizer and sprays, dates of cultivation, pruning, spraying and harvesting, materials used for spraying, production, and value of crop harvested. 1-3 credits.
- A16. Gardening. Plant, care for, and record data on a home garden of not less than one twentieth of an acre. Records should show cost of labor, seed, fertilizer, sprays, etc.; dates of cultivation and harvesting, spray application; materials used and amounts applied; and an accounting of amount and value of garden produce raised. 1-3 credits.
- A17. New Planting. Purchase and set out one acre of recommended tree species and care for same throughout the year. Keep records of kind and number of trees planted, planting methods, cost of trees and labor, special care given throughout the season, and progress of growth throughout the year. 3 credits.
- A18. Timber Harvesting. Harvesting and scaling mature trees, removing dead and unthrifty trees, thinning and replanting on at least one acre. 3 credits.

- A19. Windbreak Planting. Planting a windbreak or shelter belt of trees to shelter the farmstead, using cuttings, seed or seedlings. The selection of trees to suit the particular site and subsequent care and maintenance. 3 credits.

CONSTRUCTION PROJECTS

- B1. Farm Structures. Make a scale drawing of a farm structure which can be used as a working plan. Trace and blueprint the same. Compile bill of material and figure total cost of construction. 1-3 credits.
- B2. Farm Structure Construction. Build a brooder house, poultry house, hog house, farrowing house, sheep shelter, dairy barn, horse barn, machine shed, farm shop, or other farm buildings according to scale of recommended blueprint drawing. Record total cost of construction. 2-3 credits.
- B3. Home Improvement. Establish a water system, septic tank; install toilets, electric lights, cement walks, shower bath; improve kitchen arrangement for convenience, etc. Record cost of improvement. 1-3 credits.

COLLECTIONS

- C1. Insect Collection. Collect and mount not less than fifty insects and record location and the date of collection. The identification by common name of the mounted specimen is expected whenever possible. 1-3 credits.
- C2. Tree and Shrub Identification. Collect, press, and mount not less than fifty specimens of leaves of trees and shrubs when in full bloom. Make field notes of their character and habits of growth. 1-3 credits.
- C3. Wood Collection. Collect and mount wood samples of fifteen to twenty-four native trees. Samples to show cross and longitudinal sections and a characteristic portion of the bark, and to be no less than two inches long and one-half inch in diameter. Identify each. Prepare mountings of leaf and bloom of each tree and record, in a separate folder, distinguishing characteristics, habitat, and habits of growth of each. 1-3 credits.
- C4. Ornamental Plant Records. Record the date of first bloom and length of blooming period of not less than fifteen annual species, fifteen perennial species, fifteen trees and shrubs, and thirty wild flowers (annual or perennial). Press and mount blossom specimens of not less than five species of each of the first three mentioned groups and ten species of the fourth group. Identify all specimens. One hundred flowering plants must be the minimum included in the report. 1-3 credits.
- C5. Plant Identification. Collect, press, and mount not less than fifty herbaceous plants. Identify and make field notes on their character and habits of growth. Of these, twenty-four must be common weeds. The rest may be made up of grasses, legumes, and wild herbaceous plants. 1-3 credits.
- C6. Seed Collection. Collect, clean, and preserve in seed mounts fifty samples of grain, legume, and weed seeds. Of these, twenty-four must be common weeds. Identify all samples and indicate class of weed. 1-3 credits.
- C7. Rope Work. Make and mount a display of samples of knots, splices, and hitches. Identify use and indicate their uses. 1 credit.
- C8. Bulletin Collection. Make a collection of fifty bulletins issued by agricultural experiment stations on one particular subject, or fifteen on five separate subjects. Write a review of the significant findings of the research or other matter presented in each bulletin. 3 credits.

GENERAL

- D1. Soil Analysis. Take a composite sample of soil from one field or from several fields on the farm. Have sample tested by the soils division at University Farm, St. Paul 8. Try suggested corrective measures and report results. 1-3 credits.

- D2. Fitting, showing, and placing an animal or exhibit at a county fair, certified by the secretary of the fair board. 1 credit.
- D3. Coaching a judging or demonstration team at a county fair. 1 credit.
- D4. Preparing a demonstration, exhibit, and treatise on safety in the home and on the farm. 1 credit.
- D5. Book Report. Read and report on a certain number of recommended agricultural books and submit a written review of each book presenting its importance in the application to agriculture. 1-3 credits.
- D6. Farm Records and Accounts. Keep a record of the farm business for one year using the Minnesota Farm Account Book. Summarize and compute operator's labor earnings and the return to capital and family labor. 3 credits.
- D7. Land Clearing. Clear at least one acre of land and keep a record of the cost of labor and materials. 3 credits.
- D8. Farm Machinery. Life, use, and cost of operating farm machinery. Records are kept of the time that each machine is used on the farm. The total life of the machine is estimated, records kept of the annual repair costs, and the total cost of using machines per day and per acre is determined. 3 credits.
- D9. Community Social Improvement. Organize or provide leadership for community enterprises as 4-H Club work, Farm Bureau, Young People's Society sponsored by a church or service organization, neighborhood patrol of Boy Scouts, etc., for one full year. 1-3 credits.



Aerial View of Campus

SCHOOL EXPENSES

SCHOOL YEAR

FALL TERM

To be paid on registration day:

Registration fee*	\$ 3.00
Breakage deposit†	5.00
Health fee	1.50
Book rent	1.00
Privilege ticket	3.50
Board and room (first four weeks)	22.00
Total payment on registration day	\$38.00
Remainder of term‡	33.00
Total for fall term	\$ 69.00

WINTER TERM

To be paid on opening day:

Registration fee*	\$ 3.00
Health fee	1.50
Book rent	1.00
Privilege ticket	3.50
Board and room (first four weeks)	22.00
Total payment on opening day	\$31.00
Remainder of term‡	33.00
Total for winter term	\$ 64.00
	\$133.00
Less breakage deposit†	5.00
Total for school year	\$128.00

The above itemized statement does not take into account laboratory fees, typewriter rentals, etc. These additional fees must be paid at the beginning of the term.

NOTE—All first term fees and first four weeks' board and room must be paid on registration day. Balance of board and room must be paid on the first Monday of each four-week period.

Second term fees must be paid on opening day of the winter term. Students starting school second term must pay breakage deposit fee the same as in the first term.

* Registration fee for nonresidents of Minnesota is \$6 per term.

† Breakage deposit is refunded at the end of year if no charges for breakage, loss, etc., are brought against it.

‡ Based on five-month school year.