NOVA SCOTIA

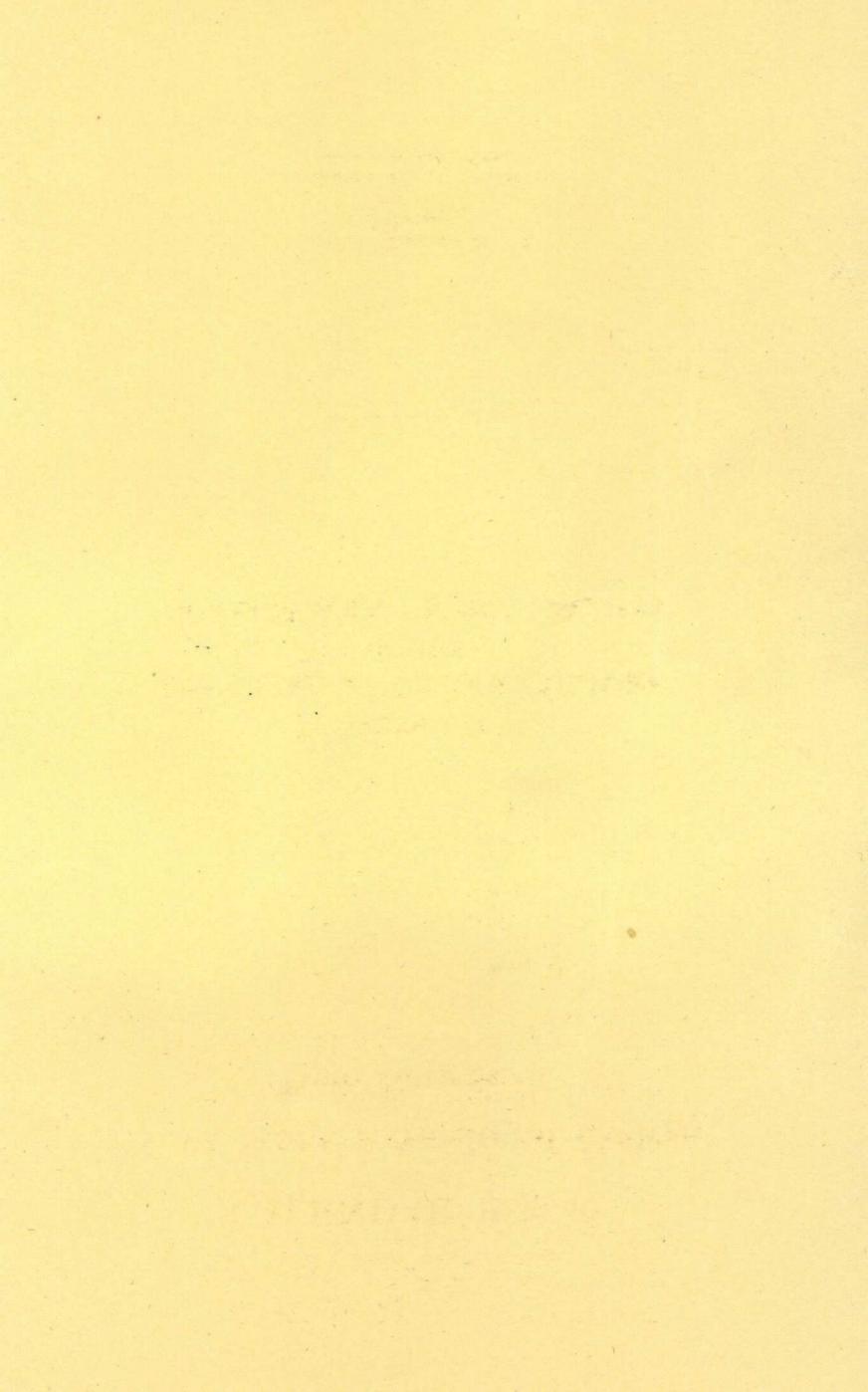
Agricultural College

TRURO, Nova Scotia



1939-1940

Department of Agriculture Province of Nova Scotia



CALENDAR 1939-40

Nova Scotia Agricultural College Truro, Nova Scotia

UNDER THE DEPARTMENT OF AGRICULTURE OF THE GOVERNMENT OF NOVA SCOTIA

Lyman T. Chapman B. S. A. Principal

Honourable John A. McDonald Minister of Agriculture

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GENERAL INFORMATION

Post Office Address: Mail is brought to the College twice daily from the town of Truro and distributed to students. All mail should be addressed simply: Nova Scotia Agricultural College, Truro, N. S.

Railways: Truro is on the main line of the C.N.R. from Moncton to Halifax and from Sydney to Halifax, and is also the terminus of the C.P.R. from Yarmouth and the Annapolis Valley.

Highways: Provincial Highways Nos. 2 and 4 lead to Truro from North, South, East and West. No. 1 Highway joins No. 2 at Bedford near Halifax.

Banks: Branches of the Canadian Bank of Commerce, Bank of Nova Scotia and Royal Bank of Canada are located in Truro.

Churches:

Baptist (First, Immanuel and Zion).

Church of England (St. Johns).

Presbyterian (St. James).

Roman Catholic (Church of the Immaculate Conception). United Church of Canada (First, St. Andrews and Brunswick Street).

Students of all religious denominations are free to enter the N.S.A.C.

College Colors: Blue and Gold.

FOREWORD

To give its students an adequate understanding of the application of agricultural science to the homes, fields and farm yards, and to develop a better understanding of rural life, is the purpose and duty of the Nova Scotia Agricultural College. The achievement of this objective is attempted from two angles: First by training boys and girls to become better farmers and citizens; second, by providing facilities for taking the first and second years of the B.S.A. degree course as a means of training farmers, college professors, research workers, experimentalists, extension men, and men for administrative positions in technical agriculture. In a word the principal product of the Nova Scotia Agricultural College is men trained in the science and arts of farming; men to man our farms, our experimental stations, our research laboratories, district representative offices, administrative positions, and the Agricultural College itself. And above all, the men in these different walks of agricultural life must have a clear understanding of the place farmers and farming occupy in this changing world of today.

The application of science in engineering, aviation, manufacturing of all kinds, has changed the tempo of life, and so agriculture, if it is to keep in step and maintain a satisfactory standard of rural life, must work that money-making team—"Science" and "Practice"—at the modern rate of speed and efficiency.

The Nova Scotia Agricultural College is situated at Bible Hill just outside the town limits of Truro, a recognized educational, industrial and railway centre. The original School of Agriculture, of which the College is the outgrowth, was established in 1885 in a few rooms of the Provincial Normal College building in Truro. In 1888, three years later, land forming the nucleus of the present valuable holdings and the site of the many buildings which have been subsequently erected—was purchased by the Provincial Government. The situation of the grounds is remarkable for beauty, health and accessibility—on the south side the high bank overlooking the Salmon River and its Valley, on the other side the marshes stretching away to the westward to Cobequid Bay.

Half a mile down the river is the town of Truro. The Provincial Normal College, the Colchester County Academy, the Success Business College and several fine churches provide every reasonable opportunity for young men and women to enjoy social activities of the right sort. In short, students of the Nova Scotia Agricultural College pursue their work under conditions which are both pleasant and healthful, and with ample opportunities to achieve that desirable "broadening" which all real education affords.

TEACHING STAFF

and

DIVISION HEADS AT AGRICULTURAL COLLEGE

- LYMAN T. CHAPMAN, B.S.A., Principal and Professor of Animal Husbandry.
- L. C. HARLOW, B.S.A., B.Sc., Professor of Chemistry and Provincial Chemist.
- W. V. LONGLEY, Ph. D., Professor of Economics and Director of Extension Service.
- W. J. BIRD, B. S.A., Professor of Dairy Industry and Provincial Dairy Superintendent.
- J. P. LANDRY, Instructor in Poultry Husbandry and Provincial Poultry Husbandman.
- C. M. COLLINS, M.S.A., Professor of Horticulture and Provincial Horticulturist.
- KENNETH COX, M.S.A., Professor of Agronomy and Provincial Agronomist.
- A. W. MACKENZIE, B.S.A., Superintendent of Exhibitions. Director of Athletics.
- C. ERIC BOULDEN, B.S.A., Instructor in Animal Husbandry and Provincial Animal Husbandman. Superintendent of Agricultural Associations.
- H. J. FRASER, B. A., Instructor in English and Librarian.
- HELEN J. MACDOUGALL, Instructor in Home Economics and Director Women's Institutes.
- H. G. PAYNE, Instructor in Apiculture and Provincial Apiarist.
- GEORGE R. SMITH, M. Sc., Instructor in Chemistry.
- A. E. ROLAND, M.A., Professor of Botany and Bacteriology and Provincial Botanist.
- J. W. BYERS, B.Sc., Instructor in Mathematics and Physics.
- E. ANGUS BANTING, B.S.A., Professor of Agricultural Engineering.
- E. E. I. HANCOCK, V.S., B.V. Sc., Professor of Veterinary Science and Provincial Animal Pathologist.
- J. H. KING, B.S.A., Instructor in Dairying and Assistant Dairy Superintendent.
- A. B. BANKS, Instructor in Farm Management and Assistant Director of Extension.
- J. MacBAIN CAMERON, Ph. D., Professor of Entomology and Provincial Entomologist.
- R. A. LANGILLE, Accountant and Business Manager.

CALENDAR FOR 1939-40 SESSION

Supplemental Examinations 9 a.m. and 2 p. m. October 10, 1939.

First Term

Registration of all students, Wednesday, October 11, 1939. Classes begin 8:45 a.m. October 12, 1939. Christmas vacation begins 4:30 p.m. December 20, 1939. Classes resume 8:45 a.m. January 3, 1940. First term examinations January 15-22 inclusive, 1940.

Second Term

Classes begin 8:45 a.m. January 24, 1940.

Instruction closes 4:30 p.m. Thursday, April 18, 1940.

Special classes for review or other purposes may be held on April 19, 1940.

Final examinations begin 9:00 a.m. Saturday, April 20, 1940. Commencement Day, May 1, 1940.

Expenses

Tuition-	Resid	ents of	Canada	Free
Students	from	outside	Canada	\$50.00

Fees—Each student is required to make a payment of \$8.00 at the beginning of the college year. Of this amount, \$1.00 goes to the Library and Reading Room, \$2.00 is held as a caution deposit, \$3.00 is paid back to the Students' Council to be used in social and athletic activities; and \$2.00 is for medical attention during the college year. Laboratory fee: Juniors and senior general \$1.00; senior degree \$2.00.

Board—Obtainable at private houses at \$5.00 to \$7.00 per week. Books—Two-year course \$15 to \$20 per year.

Incidentals—Laundry and various other small expenses must also be included in making up a budget for the year.

Railroad Fares Refunded

New Brunswick—Students from the province of New Brunswick, taking any two-year course will have one return railroad fare refunded to them each year by the New Brunswick Department of Agriculture, such refund to be made at the close of the second term.

Buildings and Equipment

The campus is painstakingly cared for, and the lawns, flower beds, shrubbery, trees, etc. form an exceptionally attractive setting for the College buildings. The College property consists of:

- 1. Seven buildings for instruction:
- (a) **The Administration Building.**—This is a large brick building constructed in 1904. It is the oldest of the present College group and is known as the "Main Building." (See Page 17).
- (b) **The Dairy Building.**—This is a commodious one-story brick building containing class room and equipment for separating milk and testing milk and cream.
- (c) The Horticultural Building.—This building contains an office for the professor of horticulture, class-room, potting and general work room, laboratory, fruit packing room and store room. Greenhouses for lecture and laboratory instruction are attached. On the second floor is the office and laboratory of the Provincial Animal Pathologist and Professor of Veterinary Science.
- (d) **The Science Building.**—This is a large brick building of modern construction and superior workmanship.
- (e) The Live Stock Judging Pavilion.—This building contains box stalls and a large circular steam-heated arena used for instruction and practice in judging all classes of live stock.
- (f) **The Poultry Buildings.**—These are located conveniently near the other College buildings and consist of (a) a roomy, well-lighted class room, (b) a well-ventilated incubator cellar, equipped with a number of different makes of incubators, (c) a permanent breeding house and (d) twenty colony brooder houses.
- (g) **Blacksmith Shop.**—The shop is supplied with forges, anvils, tools, benches, etc., for instruction in blacksmithing. Other rooms, located in various buildings, are used for studying farm machinery, gas-engines, tractors, automobiles, etc.
- (h) Woodworking.—Reasonably adequate equipment is installed in the basement of the Main Building in a space set apart for instruction and demonstration in woodworking and the use of tools.
 - 2. A General Live Stock Farm, comprising:
- (a) About 294 acres of land composed of 62 acres of dyked marsh land, 156 acres of interval and upland pasture and 76 acres of arable upland.
 - (b) A large cow barn with up-to-date equipment for 75 head

of cattle; horse barn, swine barn, sheep barn, implement sheds and modern farm machinery.

- (c) Pure bred Holsteins, Ayrshires, Guernseys, Clydesdales, Percherons, and Yorkshires. Groups of feeder steers of the beef breeds and feeder lambs of several breeds are fed during the winter for the use in the courses on breed types and live stock judging.
- (d) Several breeds of poultry are maintained for demonstration and teaching purposes.

GENERAL RULES AND REGULATIONS

1. **Personal Conduct:** Every student is expected to show respect for order, morality and the rights of others. Students found guilty of immoral, dishonest or other improper conduct, or violation of rules, shall be liable to college discipline, which includes the power of expulsion.

Students may be admonished by a professor or instructor for improper conduct and may be reported to the Principal. If considered advisable, such conduct shall be reported to parents or guardians.

Students shall not resort to any place where intoxicating liquors are sold; and any student who indulges in the use of such liquors may be required to withdraw from the College.

Students are not permitted to bring firearms into the buildings, nor is the use of firearms allowed on the College grounds.

- 2. **Progress:** Any student whose progress is unsatisfactory to the Faculty may be required to withdraw from the College.
- 3. Attendance: Students who absent themselves from class without previous arrangements with the Principal may not be permitted to sit for the examinations in the subject missed during such absence. Students are expected to attend all classes, except in cases of illness or for other sufficient cause.

Students are requested not to make application for additional leave either before or after holiday periods, as such leaves can only be granted in case of illness or other exceptional circumstances.

4. **Property Damage:** Should any student or students destroy or deface College property, the cost of repairing any such damage will be paid out of the caution deposits and if the individual deposit is insufficient, the balance shall be borne equally by all students.

- 5. **Medical Examination:** As soon as possible after enrolment, all students will be given a thorough medical examination under the direction of the Nova Scotia Department of Health.
- 6. **Student Executives:** Only students taking a regular, two-year course, shall be allowed to act as executive members of the Students Council or as members of any student committees.

Social and Literary

The churches of the town always entertain the student body on many occasions during the college year and pleasant associations are formed under the best of auspices.

The Students' Council each year appoints a social committee who co-operate with the faculty of the College in carrying on certain social activities. Informal dances on Saturday evenings from 8 p.m. to 11 p.m. are frequently held in conjunction with the Normal and Business College students, under the supervision of the student committee and one or more members of the staff. These are pleasant, friendly affairs and greatly assist students who are naturally shy and reserved to attain freedom and ease in meeting and associating with other people. Three invitation dances are also arranged for during the year.

The College Magazine

The students publish a monthly paper in which all have an opportunity to express their ideas and get experience in writing articles and editorials. The whole student body is divided into groups, each of which is responsible for an issue of the paper, now known as The A. C. Herald. This work is done under the supervision of the English Department.

Debating and Public Speaking

A Students' Debating Society meets on one evening each week and all students are required to take part. Kindly criticism is provided by members of the faculty and extremely valuable training in public speaking is thus obtained. If time permits, debates are also arranged with neighboring institutions.

Library and Reading Room

The College Library has been reorganized and a large amount of bulletin material made available. Students are invited to make full use of the library, which is being brought up to date by the addition of select new books.

The Reading Room is designed to provide reading material for the students in any leisure hour they may have. A considerable number of periodicals, literary, scientific and general, are placed within reach of the students, besides the daily papers and an assortment of farm and trade journals.

Physical Training and Athletics

Considerable progress is being made in this branch of the college activities under the supervision of the Director of Athletics. All phases of athletic activity and the gymnasium and equipment are under his control. Systematic physical training is required of all first year students, and of all second year students, as far as time will permit. Teams participate in local league competitions in hockey and basketball, and also in interclass competition in hockey, basketball and volley ball, with a staff team competing in the latter. Instruction is also given in boxing, wrestling, etc.

An open air rink is provided on the campus for skating and hockey, a staff member coaching the hockey teams.

It is hoped that every student will participate in some form of athletic activity, under the following regulations:

- 1. Class Standing: No student with an average for the past term of less than 50 per cent, or less than 40 per cent in one or more subjects, will be permitted to play on more than one team representing the College.
- 2. Outside Sports: Students wishing to take part in sports, other than college activities, as players, officials, referees, etc., must obtain permission from the Principal.
- 3. Faculty Representative: (a) A staff member, appointed by the faculty, shall be a member of the student athletic committee or any such committee that controls student athletic activities and expenditures of student funds for athletic equipment and activities.
- (b) All teams or groups that may go to any other community or institution to participate in athletic or other activities, shall be accompanied by a member of the faculty.
- 4. **First Aid:** With the co-operation of the St. John Ambulance Association, the College will provide instruction in First Aid and allied topics at a nominal cost to students. These classes will be held during first term, outside regular class hours, and attendance is optional.

The L. C. Harlow Basket-Ball Trophy

In 1931 Professor L. C. Harlow donated a silver trophy for Inter-Class Basket-ball. It has been in competition every year and up to the present time it has been won each year by a senior class team.

Inter-year basket-ball and volley-ball schedules make it possible for all students to take part in some type of athletics under proper supervision.

THE COLLEGE WINTER FAIR

During each college year beginning in 1935-36 the students of the general course put on a College Winter Fair. It is an annual competition in fitting and showmanship rather than a contest among the animals exhibited. Horses, cattle, sheep, swine and poultry are used in the competition. Students are required to fit and exhibit one pair of poultry and one animal representing each of the different classes of live stock.

For some time prior to Fair day, students devote the necessary time to grooming and fitting the animals and on Fair day they are paraded before a committee of judges, who award the ribbons according to merit. There are silver trophies awarded for the champion fitter and exhibitor in the different classes. These are as follows:

- Dairy Cattle —*The Dr. John M. Trueman trophy, won in 1936-37 by N. C. Smith '38, Shinimicas, N. S.; 1937-38—James M. Thomson '38, Belleisle Creek, N. B.; 1938-39—Hugh E. Main '39, Noel Shore, N. S.
- Horses The Dr. M. Cumming trophy, won in 1936-37 by J. R. MacLean '38, River John, N. S.; 1937-38— James M. Thomson '38, Belleisle Creek, N. B.; 1938-39—Laurie A. Ells '39, Sheffield Mills, N. S.
- Sheep The H. K. MacCharles trophy, won in 1936-37 by L. A. Westcott '38, Wolfville, N. S.; 1937-38—Kenneth Holmes '38, River John, N. S.; 1938-39—J. W. Macdonald, '39, River John, N. S.
- Swine The F. W. Walsh trophy, won in 1936-37 by E. P. Jarvis '38, Stanley, N. B.; 1937-38—Stanley L. Curtis '38, Princeport, N. S.; 1938-39—A. K. Rand '39, Port Williams, N. S.

Poultry

-The J. P. Landry trophy, won in 1936-37 by J. R. MacLean '38, River John, N. S.; 1937-38—Gerald Smeltzer '39, Upper Vaughan, N. S.; 1938-39—A. Ross Hill '39, Onslow, N. S.

Seeds

—The Kenneth Cox trophy awarded for the best preparation of seed for exhibition. Miniature trophy for winner. Won in 1938-39 by A. Jack Baillie, River John, N. S.

The Grand Challenge Shield, donated by the Honourable John A. McDonald, Minister of Agriculture, in 1935-36, is awarded to the student who wins the highest total score for all classes. The winners are as follows:

1935-36—Herbert Coombs, Windsor, N. S.

1936-37-J. R. MacLean, River John, N. S.

1937-38-Gerald Smeltzer, Upper Vaughan, N. S.

1938-39-A. Keith Rand, Port Williams, N. S.

*This was donated in memory of our former Principal, the late Dr. J. M. Trueman, by Mrs. Trueman and their two sons, Howard and Albert.

ENTRANCE REQUIREMENTS

All candidates for admission to all courses;

(1) Must have passed their sixteenth birthday.

(2) Must produce satisfactory evidence as to moral character.

(3) Must produce satisfactory evidence of physical health.

Two Two-Year Courses Offered

1. General Course: A two-year course designed for young men who expect to continue as farmers, or to become farmers, and who desire to occupy a position of responsibility and leadership in the respective communities. Young men with initiative and ambition will find it both enjoyable and profitable to spend two college years (October to April) getting a knowledge and an understanding of the application of science to managing a farm, its soil, crops, live stock, poultry and marketing the products thereof. The training, if properly applied, will assist young men and women in getting the things out of life they are entitled to in terms of better farms, comfortable and modern homes and a more abundant life in general.

To enter this two-year general course applicants must have satisfactory school standing—preferably Grade X. Those who are recommended by responsible persons and who are fairly mature, but have not the requisite high school standing, will have their applications carefully considered. Applicants must have had satisfactory farm experience.

Options: The work of the first year is taken by all students. In the second year a student may take either the "Horticulture" option or the "Mixed Farming" option. These optional courses are offered for the first time this year.

Each student in the incoming second year of the General Course will be required to carry on a project relating to agriculture during the previous summer. This work will consist of a study of some problems in agriculture, such as growing crops, feeding and care of live stock, marketing farm products, farm records, community work, etc. Students will confer with instructors during the second term of the first year and decide on the project to be undertaken. It must be approved by the head of the department under which the work is to be supervised.

2. **Degree Course:** The first and second years of the four-year B.S.A. course, designed to give an adequate grounding in the sciences, with as much of the more practical and vocational training as time permits. The course of studies is determined largely by the admission requirements of Macdonald College and of the Ontario Agricultural College where N.S.A.C. students, who qualify for admission, pursue the third and fourth years' studies.

Candidates for this degree course must have a Nova Scotia Grade XI certificate or its equivalent.

SYLLABUS OF COURSES

(See Page 26)

DESCRIPTION OF COURSES

The following courses are arranged for the college year 1939-40. The faculty reserves the right to make any revisions and additions that may be found necessary.

AGRICULTURAL ENGINEERING

1. (a) **Elementary Building Construction:** Planning of farmsteads, farm homes; other farm buildings; remodelling buildings. 1st yr. 2nd term—1 lec. and 1 lab. per week.

- (b) **Elementary Plan Drawing:** Use of drawing instruments; practise in drawing building plans.

 1st yr. 2nd term—1 lab. per week.
- 2. (a) **Drainage Surveying.** Chaining and levelling for purpose of farm plan drawing and drain installation. Computation of areas; making of maps and profiles.

2nd yr. 1st term—concentrated in first two weeks of term.

(b) **Drainage.** Discussions on all phases of farm drainage problems.

2nd yr. 1st term—1 lec. per week.

3. (a) Farm Shop Work I: Practical work in wood-working; glazing; saw filing, etc.

1st yr. 2nd term—2 labs. per week.

- (b) **Farm Shop Work II:** Rope splicing; belt lacing; harness repairing; cold metal work; forge work.

 2nd yr. 2nd term—1 lab. per week.
- (c) Farm Machinery, Tools and Appliances: The construction, adjustment and lubrication of implements, tools, etc. 2nd yr. 1st term—1 lab. per week.

AGRONOMY

- 4. **Field crops.** History; importance; adaptation; rotations; study of crops grown in Maritime Provinces and seed identification. 1st yr. 1st term—1 lec. and 1 lab. per week.
 1st yr. 2nd term—1 lec. and 1 lab. per week.
- 5. **Seeds** (1) A study of suitable varieties and what constitutes good seed of these varieties; sources of supply; preparation; grading; use of seed cleaning machinery. Grading regulations and services. Canada Seeds Act. Canada Grain Act. Judging. 2nd yr. 2nd term—1 lec. and 1 lab. per week.

Seeds (2) Seed Shows. Preparation for shows, etc. 2nd yr. 2nd term—2 lecs. or 1 lab. per week.

6. **Genetics.** An introduction to the study of heredity and variations.

2nd yr. 1st term-2 lecs. per week.

ANIMAL HUSBANDRY

- 7. Breeds and Breeding of Live Stock. A study of breeding policies and practices, the origin, types and breed characteristics of:
 - (a) Dairy cattle and beef cattle.

1st yr. 1st term-1 lec. per week.

(b) Horses, sheep and swine. 2nd yr. 1st term—2 lecs. per week.

- 8. **Judging**. Placing with reasons (both written and oral). Judging live stock includes trips to herds of prominent live stock breeders.
 - (a) Breeding and market classes of cattle.

1st yr. 1st term—2 labs. per week.

- (b) Breeding and market classes of sheep, swine and horses. 2nd yr. 1st term—2 labs. per week.
- 9. **Feeds and Feeding.** A study of grains, roughages, protein supplements and the compounding of rations, value and suitability of different feeds and mixtures for the various classes of live stock.

1st yr. 2nd term—1 lec. and 1 lab. per week.

- 10. Care and Management. The care and handling of all classes of live stock; stabling, feeding, breeding and general attention.
 - (a) Dairy cattle and beef cattle.

1st yr. 2nd term—1 lec. per week.

- (b) Horses, sheep and swine.
- 2nd yr. 2nd term-1 lec. per week.
- 11. **Meats.** The meat trade; preparing meat animals for slaughter; slaughtering, cutting, curing. Correlation of maximum utility in dressed meats with characteristics of live animals. (Time as required).
- 12. **Pedigrees.** Practice in compiling extended pedigree and breeding histories of pure bred live stock. How to use herd books and milk records.

1st yr. 2nd term-1 lab. per week (half term).

13. Live Stock Advertising, selling and buying. Discussions of the various methods of buying and of selling pure bred live stock; mock auction sales.

2nd yr. 2nd term-1 lab. per week (half term).

14. College Winter Fair. A competition in fitting and exhibiting cattle, horses, sheep, swine and poultry.

1st and 2nd yrs. 2nd term—time as required.

APICULTURE

15. Farm Beekeeping. A course in modern beekeeping practices will be given with particular reference to the keeping of bees on the average farm. In addition to discussions on spring management, installation of package bees, swarm control, queen rearing, increase, preparation for winter, etc., the practical feature of preparing equipment, such as assembling hives, frames and honey extraction will be taken up in the laboratory.

2nd yr. 1st term—1 lec. and 1 lab. per week.

BIOLOGY

16. **Introductory Botany**. A general course covering the fundamentals of plant structure, growth, reproduction and classification, using representative groups of the plant kingdom for laboratory study.

1st yr. both terms-2 lecs. and 2 labs. per week.

17. **Economic and Systematic Botany.** A study of the chief families of flowering plants, along with identification and control of weeds, etc. Each student must bring to the class a collection of 40 weeds and 40 weed seeds. These should be collected during the holiday period between the first and second year, and must be pressed and mounted according to instructions which will be given in class. This work must be completed before credit will be given for the course 2nd yr. both terms—2 lecs. and 2 labs. per week.

18. Economic Botany.

- (a) A general course in the structure, growth and reproduction of agricultural plants.
- Alternate yrs. 1st term-2 lecs. and 1 lab. per week.
- (b) Plant diseases and their control.

 Alternate yrs. 2nd term—2 lecs. and 1 lab. per week.
- (c) An additional lecture course in plant pathology given in the Horticultural Option.
- 19. **Bacteriology.** An introductory course which aims to acquaint the student with the morphology, physiology and methods of reproduction of molds, yeasts, and bacteria; the relationship of each to agriculture as well as to disease.
- 2nd yr. 2nd term-2 lecs. and 1 lab. per week.
- 20. **Zoology.** An introductory course in general zoology, covering the anatomy, histology, physiology and reproduction of animals. Representatives of the more important phyla of the animal kingdom are studied in the laboratory.

1st yr. both terms-2 lecs. and 2 labs. per week.

- 21. **Economic Entomology.** This deals with the identification and control of the insects which affect farm crops, fruit trees, live stock and stored products. It is designed for those students who intend to practise farming in the Maritime Provinces. Alternate yrs. both terms—1 lec. and 1 lab. per week.
- 22. **Economic and Systematic Entomology.** This is an introductory course in the identification of insects as well as their importance and control. Each student must bring to the class at the beginning of the college year a collection of 150 adult insects. These must be mounted and classified according to instructions

which will be given in class, and this work must be completed before credit will be given for the course.

2nd yr. both terms-2 labs. per week.

23. Genetics. An introduction to the study of heredity and variation.

2nd yr. 2nd term-2 lecs. per week.

CHEMISTRY

24. Elementary Chemistry and Quantitative Analysis. A lecture and laboratory course illustrating the principles governing chemical change, the characteristics of the common elements and their compounds; the formation of acids, bases and salts; simple organic compounds, foods and fuels; as many illustrations as possible will be taken from farm experiences. Quantitative experiments will illustrate the laws of combination.

1st yr. both terms—2 lecs. and 2 labs. per week.

25. **Geology.** The study of minerals and rocks which form soils and rock formations which influence water supply and drainage problems.

1st yr. 1st term—1 lab. per week.

26. **Soil Physics.** Properties of soils studied as to texture, color, water holding capacity, soil temperature, and other factors which bear on soil fertility. Soil types as found in the Maritime Provinces.

1st yr. 2nd term-1 lab. per week.

- 27. **Analytical Chemistry.** Practice, together with the study of the principles involved, in the qualitative determination of basic and acidic elements and radicles and typical quantitative determination of the same volumetrically and gravimetrically. 2nd yr. 1st term—1 lec. and 3 lab. per week.
- 28. **Organic and Biochemistry.** Preparation and study of the classes of organic substances. Formation of and changes in organic matter as found in plant and animal life. 2nd yr. 2nd term—3 lecs. and 2 lab. per week.
- 29. General Chemistry. Composition of matter and physical changes. Kinds of chemical changes and the laws which regulate them. Study of acids, bases, salts, and gases, such as oxygen, nitrogen, ammonia, carbon dioxide. Throughout the course experiments with water, air and simple organic substances will connect the work with the principles of drainage, composition of soil feeds, fuel and spray materials. The second term will include a study of soils, their origin, causes of variation in value, and a course to illustrate the physical characteristics of soils.

1st yr. both terms-2 lecs. and 2 lab. per week.

(Continued on Page 21)



FIRST ROW, left to right—L. A. Ells, Sheffield Mills, N. S., C. A. Durno, Cambridge Station, N. S., R. F. Roach, Nappan, N. S., B. D. Douglas, Scotsburn, N. S., J. A. Stewart, Grand Pre, N. S., J. C. Reid, Kinkora, P. E. I.

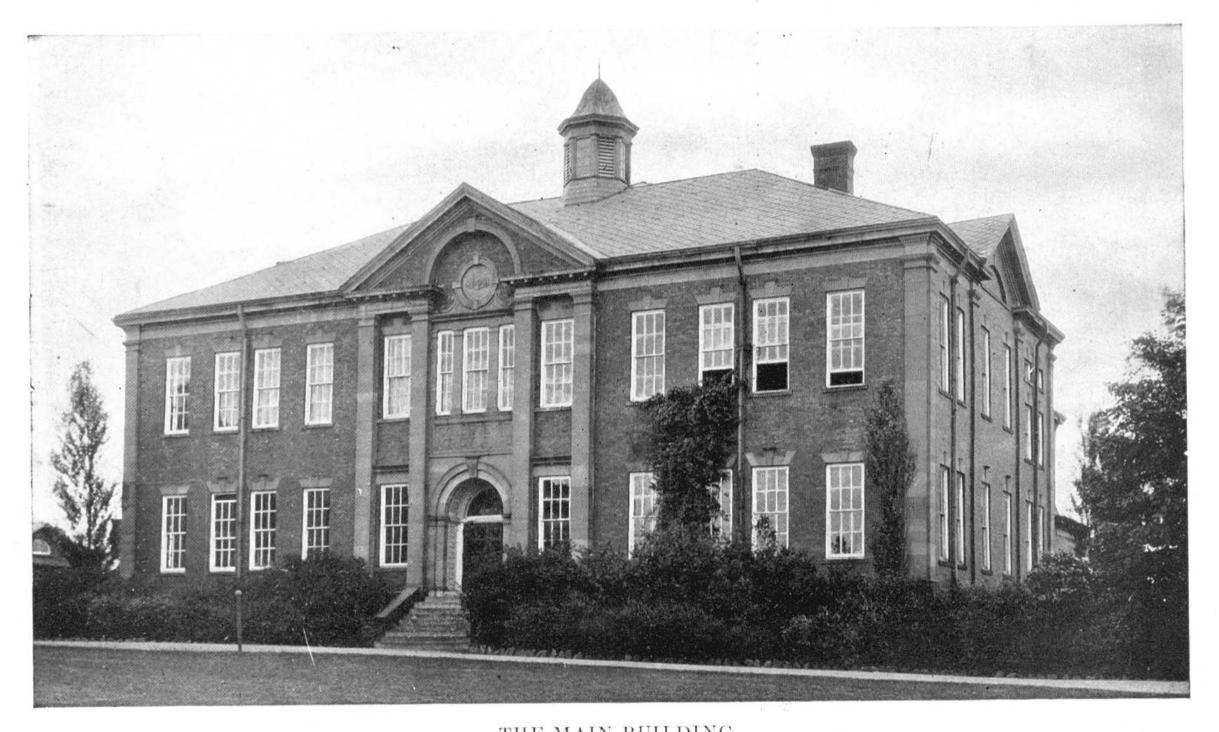
SECOND ROW, left to right—L. V. Longley, Paradise, N. S., E. L. MacDonald, Stellarton, N. S., C. P. Foley, Streets Ridge, N. S., A. J. Baillie, River John, N. S., R. G. Tompkins, Little Codroy, Newfoundland, M. A. Trefry, Yarmouth, N. S.

THIRD ROW, left to right—A. I. Magee, Berwick, N. S., D. V. MacDonald, Antigonish, N. S., L. T. Chapman, B. S. A., Principal, Truro, H. E. Main, Noel Shore, N. S., D. B. Trueman, Parrsboro, N. S.

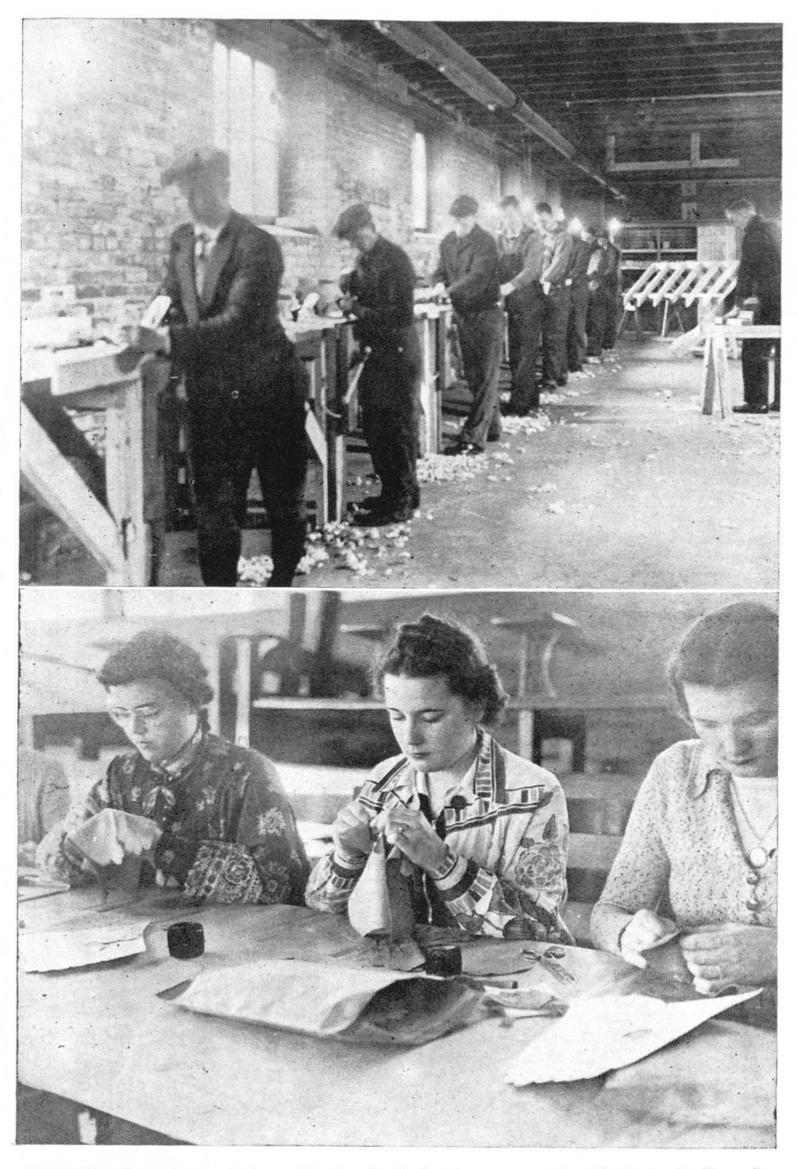
FOURTH ROW, left to right—E. Y. Lane, Jr., Truro, N. S., J. W. MacDonald, River John, N. S., P. A. Archibald, Glenelg, N. S., J. S. MacRae, Windsor, N. S., G. H. Fisk, Middle Musquodoboit, N. S.



The "Spring and Summer" short course—May 2 to June 30, 1939—the first course of its kind ever held at the N. S. A. C. Conducted jointly by the Nova Scotia Department of Agriculture and the Dominion Department of Labour under the Youth Training Movement. The boys are posed on the front steps of the Science Building.



Principal's Office, Departments of Agricultural Engineering, Agronomy, Animal Husbandry, Economics, Extension Service, Exhibitions, Agricultural Societies, English, Dairying, Librarian, Mathematics, Physics, and Poultry. At the rear is the Assembly Hall and Gymnasium.



UPPER—Boys in the "Farm Mechanics" short course at the N. S. A. C. Dec. 5—23, 1938, taking instruction in woodworking. (See page 36 for short course dates).

LOWER—Girls in the "Home Crafts" short course at the N. S. A. C., Jan 17—Feb. 10, 1939, and Feb. 21—Mar. 17.

DESCRIPTION OF COURSES

(Continued from page 16)

30. Agricultural Chemistry. Composition of the animal body, feeds, and the explanation of the changes that take place in digestion. Farm water supply.

Soils and Fertilizers. Composition, differences and uses of the various soils as found in Nova Scotia with study of the fertilizers used to improve the soil.

2nd yr. both terms-1 lec. and 2 lab. per week.

DAIRYING

31. **Farm Dairying.** A general course of lectures and laboratory work, which may be applied to practical farm dairying in Nova Scotia. The lectures deal with composition of milk; factors influencing composition of milk; care of milk and cream on the farm; cow testing; elementary calculations pertaining to milk and its products; Dairy regulations. Laboratory work consists of testing milk, skimmed milk and cream by the Babcock method, operating separators; elementary tests for quality of milk; farm buttermaking. 2nd yr. 2nd term—1 lec. and 2 lab. per week.

ECONOMICS

- 32. The Development of Agriculture. An orientation course in agriculture. A study of the development of Canadian agriculture, more particularly as applied to the Maritime Provinces. The present status of agriculture, how organized, its relation to other industries.
- 1st yr. 1st term-1 lec. per week.
- 33. **Principles of Economics.** A study of the elementary principles of Economics in the effort to present a picture of the main factors influencing our economic organization.

 2nd yr. 1st term—3 lecs. per week.
- 34. Marketing of Farm Products. Marketing principles, agencies, methods, services and regulations. The use of market information. Co-operative marketing.
- Alternate years 2nd term—2 lecs. and 1 lab. per week.
- 35. Rural Sociology. A study of rural conditions. Rural organizations. Standards of living. Community development. Alternate years 2nd term—2 lecs. per week.

ENGLISH

- 36. History of English Literature.
- (a) From the withdrawal of the Romans to the age of Samuel Johnson.

1st yr. both terms—1 lec. per week.

- (b) From the death of Johnson to the present. 2nd yr. both terms—1 lec. per week.
- 37. Class Reading and interpretation of typical English prose and poetry.
 - (a) Elizabethan drama, poetry and prose.

Shakespeare: Hamlet, MacBeth, King Lear.

English Essays.

For outside reading-

Kingsley: Westward Ho.

Reade: The Cloister and the Hearth.

1st yr. both terms—1 lec. per week.

(b) Romantic and Nineteenth Century literature, prose and poetry.

English Short Stories.

Typical fiction assigned for reference reading. 2nd yr. both terms—1 lec. per week.

- 38. Composition.
- (a) Junior Composition. Word, sentence and paragraph study. Weekly compositions required.

 1st yr. both terms—1 lec. per week.
- (b) Senior Composition. Introduction to various types of prose writing. Themes required illustrating these types. 2nd yr. both terms—1 lec. per week.
- (c) A course will be offered in more elementary English for the benefit of general students who have not had high school training.

One or two lectures per week throughout the year, as the exigencies of the time table will allow.

Brief courses are also given in the history of the drama, in an outline of Canadian literature, in news writing and journalism.

39. **Public Speaking.** The work in this course is done chiefly in the student debating club. At least fifteen evenings per year for both 1st and 2nd years.

FARM MANAGEMENT

40. Farm Business. A study of the business of farming; types of farming; farm planning. The combination of land, labor, equipment and management in the farm enterprises.

Farm Computations. How to calculate acres of land in a field; tons of hay in a stack or mow; bushels in a bin; standard weights and measures, etc.

1st yr. 1st term-2 lecs. and 1 lab. per week.

41. **Farm Accounting.** Factors affecting farm income. How to keep a useful set of books. How to keep records of farm activities and operations; notes, cheques; receipts, etc. 1st yr. 2nd term—1 lec. and 1 lab. per week.

HORTICULTURE

- 42. **Principles of Vegetable Growing.** Discussion of the basic principles underlying the growing of vegetable crops. This attempts to outline the different types of production, and to discuss adaptation of soils, cultivation, fertilizers, seeds, storage and growing of vegetable plants.
- 2nd yr. 1st term—1 lec. per week.
- 43. **Vegetable Crops.** The lecture periods in this course take up the culture of specific vegetable crops, covering the field of those vegetables grown for commercial or garden use in Eastern Canada. The laboratory periods take up in more detail the discussion and examination of types and varieties, judging work with the more common vegetables in order to fix these types in the student's mind. In addition the student will be given opportunity to become familiar with seeds of different varieties of vegetables. 2nd yr. 1st term—2 lecs. and 1 lab. per week.
- 44. **Propagation of Plants.** This course will cover such subjects as germination, seed testing, layerage, division, separation, cuttings, growth substances, potting, transplanting, propagating, structures, grafting, budding, root stocks.

 1st yr. 2nd term—1 lec. and 1 lab. per week.
- 45. **Practical Orcharding.** This course attempts to cover, from a project standpoint, the different operations from the establishment of an orchard, through pruning, fertilizing, cultivation, spraying, thinning, harvesting, grading and marketing, etc. 1st yr. 2nd term—2 lecs. per week.
- 46. **Basic Principles in Orcharding.** This attempts to give the fundamental reasons underlying our orchard practices, by discussing such points as fruit bud formation, functions of the various elements in tree development, types of growth, effects of pruning, effects of low temperatures, pollination, ripening of fruit, storage changes, etc.
- 2nd yr. 2nd term-1 lec. per week.
- 47. Small Fruits Culture. Discussion of the various factors entering into the establishment of small fruit plantings and the culti-

vation, pruning, harvesting and marketing of the various small fruits of importance in Eastern Canada.

1st yr. 1st term-2 lecs. per week.

- 48. **Elementary Systematic Pomology.** Study of principles underlying the classification and identification of fruits, with study and examination of specimens and varieties together with some fruit judging work.
- 2nd yr. 1st term—1 lec. and 1 lab. per week.
- 49. **Elements of Landscape Gardening.** Outline of some of the basic principles in landscape work, with application to improvement of farm home grounds. This will include something on the care of shrubs, trees, lawns, flowers. May not be given till 1940. 2nd yr. 1st term—1 lec. and 1 lab. per week.
- 50. **Forestry.** Instruction in care and management of the farm woodlot and methods of reforestation.

 2nd yr. 2nd term—1 lec. (five weeks).

MATHEMATICS

51. Variation. Logarithms. Trigonometric ratios. Problems in heights and distances. Surveying problems. Solution of triangles. Radian measure. Compound interest. Graphs. Plotting or simple curves.

1st yr. both terms-3 lecs. per week.

52. Binomial Theorem. Approximations. Exponential series. Natural Logarithms. Formulation of Calculus. Differentiation. Slopes; Rates; Maxima and Minima. Simple Integration. Integration between limits; Areas.

2nd yr. both terms-3 lecs. per week.

PHYSICS

53. **Mechanics.** Simple machines; work and power; laws of motion; stress and strain; modulus of elasticity.

Hydraulics. Pressures; density and specific gravity; liquids in motion.

Sound. Wave motion; resonance; vibrating bodies.

The application of Mathematics to Physics is stressed through working problems.

1st yr. both terms-3 lecs. and 1 lab. per week.

54. **Electricity.** Electric circuits; instruments; measurements basic laws; generators and motors.

Heat. Effects of heat on solids, liquids and gases; conductivity and insulation; principles of refrigeration; radiation.

Light. Spectra; illumination; instruments; photo-electric cells. 2nd yr. both terms—3 lecs. and lab. per week.

- 55. (a) **General Farm Physics.** A study of the principles of machines, water systems, heating, insulation, etc. 1st yr. 1st term—2 lecs. per week.
- (b) Rural Electrification. The use of electric power on the farm, including discussions of farm lighting plants; power lines; types of motors; electrical code; house wiring; storage batteries; gas engines; ignition systems, etc.

2nd yr. both terms-1 lec. and 1 lab. per week.

POULTRY

56. **History and scope of poultry production** work in Canada and the Maritime Provinces in particular; a brief introduction to the origin of the breeds of poultry and their adaptability to our climate; anatomy and physiology; judging.

Principles of poultry house construction; laying house; brooder house; materials required; interior equipment; yards.

Formation of the egg and the chicken; natural and artificial incubation; brooding; composition of fowl's body and egg in relation to feed consumed.

1st yr. 1st term-2 lecs. per week.

57. Selection and Management of a Poultry Farm. A study of the community interest in different parts of the province, factors of location which affect production and profit. Cost of production, value of product, profit and loss. System in feeding.

Principles and Practice of Poultry Feeding. Digestibility and composition of feeds; minerals; vitamins; rations; system in feeding; feeding chicks, growing stock, layers.

1st yr. 2nd term—2 lecs. per week.

58. **Diseases, parasites and enemies of poultry.** Hygiene and sanitation; a study of external and internal parasites.

Management of Turkeys, Geese and Ducks. Breeds; feeding; rearing and marketing.

2nd yr. 1st term—1 lec. per week.

59. **Breeding**—a study of fundamental principles of poultry breeding; Mendel's Law in relation to poultry breeding; trap-nesting; culling; management of breeding stock.

Marketing poultry—broilers; roasters; capons and caponizing; fattening; killing and dressing; a study of market regulations and standards for different markets.

Marketing eggs—commercial standards; wholesale trade; retail trade; co-operative marketing in the Maritimes. 2nd yr. 2nd term—1 lec. and 1 lab. per week.

VETERINARY SCIENCE

- 60. Veterinary Hygiene and Anatomy. A study of the body structures, their functions and actions. Care and handling live stock in health, as well as sickness. 1st yr. 2nd term—2 lecs. per week (6 weeks).
- 61. Animal Diseases and Nursing. Dealing with the causes and prevention of the more common ailments of farm animals, together with the unsoundnesses of horses. 2nd yr. 2nd term—2 lecs. per week (6 weeks).
- 62. Silver Foxes. A study of breeding, feeding and managing on the basis of a live stock enterprise on the farm. 1st yr. 2nd term—2 lecs. per week (half term).

SYLLABUS General Course

To ascertain the nature of courses given, select title and number of any course listed in the tabulation below, and refer to the same title and number on previous pages under "Description of Courses".

Abbreviations "Lec"—Lecture period of 45 minutes.

"Lab"—Laboratory period of $1\frac{1}{2}$ hours.

Note—The time allotted to each subject per week is indicated below:

	First Term per week	Second Term per week		
No.	Lecs.	Labs.	Lecs.	Labs.
FIRST YEAR				
Agricultural Engineering: Elementary Building	1	1	••••••	1 2
Agronomy: Field Crops4	1	1	1	1
Animal Husbandry: Breeds and Breeding	********		i	1 1
Botany: General (alternate years)	 2	1 2	2 2	1 1 2
Economics: Development of Agriculture	1		 2 2	1
English: History of English Literature	1 1 1 As require	d	1 1 1 Durses	
Entomology: Economic (alternate years)21	1	1	1	
Farm Management: Farm Business and Computations40 Farm Accounting41	2	1	1	1

Subjects	Course	First Term per week		Second Term per week	
*	No.	Lecs.	Labs.	Lecs.	Labs.
Horticulture:					
Propagation of Plants	44			1	
Small Fruits	47	2			
Practical Orcharding	45			2	
Physics: General Farm	55a	2			
Physical Training: (See page 9)	===	As re	quired		
Poultry: History, Housing, Incubation Feeding, Management	56	2		2	
	07	******		2	
Veterinary: Anatomy and Hygiene (six weeks) Silver Foxes (half term)	60 62			$\frac{2}{2}$	
SECOND YEAR (Mixed Farming Option)					
agricultural Engineering:					
Drainage Surveying	2a		two we	eks as re	eq'd.
Drainage	2b	1			
Farm Shop Work II		*******			
Agronomy:	5a			1	
Seeds (1)				2	
Geneticsnimal Husbandry		2		200	
Breeds and Breeding	7b	2			
Judging	8b		2		
Care and Management	10b			. 1	
Advertising and Selling (half term) College Winter Fair	13 14	•••••			require
piculture: Farm Beekeeping	15	1	1		
Biology: Botany, General (alternate years)	182	2	1		
Botany, Economic (alternate years)	18b			2	
Bacteriology	19				:
Entomology, Economic	21	1	1	1	
Chemistry: Agricultural Chemistry	30	1	2	1	
Dairying:	21			1	
Farm Dairying	51				
Economics: Principles of	33	3			
Marketing (alternate years)	34			. 2	2
Rural Sociology (alternate years) English:	35		******	2	2
History of English Literature	36b	1	•••••		
Class Reading	37b	1	*******	7	l
CompositionPublic Speaking	39	See	lescripti	on of co	ourses
Horticulture: Vegetable Growing Forestry (five weeks)	42	1		4	i
Physics: Rural Electrification	55b	1	1		L
Poultry: Diseases, etc					
Turkeys, Geese and Ducks Breeding and Marketing	58 59	1			i
Veterinary Science:					
Animal Diseases and Nursing (six weeks)	61				2

SECOND YEAR—(Horticulture Option)

Subjects	Course	First 'per w		Second Term per week		
	No.	Lecs.	Labs.	Lecs.	L	abs.
Agricultural Engineering: Drainage Surveying. Drainage Farm Shop Work II. Farm Machinery.	2 b 3 b	First t	wo wee			<u>1</u>
Agronomy: Seeds (1) Genetics Animal Husbandry: Breeds and Breeding Judging Care and Management	5a 6 7b 8b	2 1	1			1
Apiculture: Farm Beekeeping		1	1			
Biology: Botany, General Botany, Economic Bacteriology Entomology, Economic	18b	2 1	1		2 2 2	1 1 1 1
Chemistry: Agricultural	30	1	2		1	2
Dairying: Farm Dairying	31				1	2
Economics: Principles of	34	3			 2 2	i
English: History of English Literature Class Reading Composition Public Speaking	36b 37b 38b	1 1 1 See des	scriptio		1 1 1 urs	 ses
Horticulture: Principles of Vegetable Growing Vegetable Crops Basic Principles in Orcharding Systematic Pomology Landscape Gardening Forestry (five weeks)		1 2 1 1	1 1 1		 1 1	
Physics: Rural Electrification		1	1		1	1
Poultry: Diseases, etc. Turkeys, Geese, Ducks Breeding and Marketing	58	1			ï	·····i
Veterinary Science: Animal Nursing (six weeks)					2	

SPECIAL NOTES FOR STUDENTS

- 1. A study of the syllabus will reveal that certain courses are taken by both "general" and "degree" classes as one group.
- 2. It will be noticed that certain courses are given alternately and in such cases both first and second years will take the lectures in one group.

SYLLABUS Degree Course

Subjects Course	First Term per week		Second Term per week	
No.	Lecs.	Labs.	Lecs.	Labs.
FIRST YEAR				
Agricultural Engineering:			1	1
Elementry Building	*******	*******	1	. 1
Agronomy: Field Crops4	1	1	******	
Animal Husbandry: Breeds and Breeding of Live Stock 7a Judging	1	9		
Feeds and Feeding				1
Care and Management10a Botany:	*******			l
Introductory16	2	2	2	2 2
Chemistry: Elementary and Qualitative Analysis24	2	2	2	2 2
Geology25		1		
Soil Physics				. 1
Economics: The Development of Agriculture32	1		******	
English: History of English Literature36a	1		1	
Class Reading37a	1			
Compostion	See des	scriptio	n of cou	ırses
Horticulture:				
Practical Orcharding	2			
Mathematics51	3		:	3
Physics	3	1		
Poultry	$\frac{2}{2}$	2		
SECOND YEAR				
Agricultural Engineering:				. 1
Farm Shop Work II	*******	1	******	
Agronomy:				
Seeds	•••••		1	.]
Breeds and Breeding of Live Stock 7b	2	******		
Judging	* * * * * * *	2		
Apiculture15	1	1		
Bacteriology				
Botany:	2	2	2	2 2
Economic and Systematic17 Chemistry:	2		· · ·	-
Analytical27	1	3		
Organic and Biochemistry28	*****	******		
Dairying31	******	2		
Entomology	3			
English:	1		1	
History of English Literature36b Class Reading37b	1		1	
Compostion38b	1	*******	1	
Public Speaking	See des		n of cou	rses
Horticulture:	*******	*******		
Vegetable Growing42	1			
Forestry (5 weeks)50	*******			
Mathematics52	3			
Physics54	3	1	3	3 1

THE COLLEGE DIPLOMA

Those who complete the two year course and make not less than 40 in each subject and an average of 50 will be awarded a diploma. Those who take the subjects necessary to qualify for entrance to the third year at Macdonald College or the Ontario Agricultural College, and who meet the respective standards of scholarship, will be recommended to either institution and will be admitted, provided the matriculation requirements have been fulfilled. The N.S.A.C. Diploma confers upon the graduate the status of "Associate of the Nova Scotia Agricultural College with all the rights and privileges pertaining thereto."

Final examinations will be given in all courses each term. Where a course is continuous throughout the year it will be divided into two sections, one for each term, and students will be required to pass in each section, excepting first-year students, who fail to make a pass on the first term's work in any continuous course, may be allowed to have their first and second term marks averaged for the year.

Students who are conditioned, that is, make less than 40, in courses of an aggregate value of more than 12 credits in one year will not be permitted to go on to the next year's work or will not be awarded a diploma. They may by vote of the faculty be permitted to repeat the year in which they failed. (One lecture period per week for one term is rated as one credit. One laboratory period per week for one term is rated as one credit).

Students who are conditioned in courses of an aggregate value of 12 credits or less in one year may write supplemental examinations.

By special permission of the Faculty a student who is allowed to repeat a year may be exempted from attending lectures and passing examinations in one or more subjects in which he has already passed creditably and in the case of a student repeating the first year's work he may be required to take one or more subjects of the second year in order to lighten his second year's work.

Class standing at the end of each term will be reported by divisions, as follows:

75% or over	A Division	50% to 59%	C Division
60% to 74%	B Division	40% to 49%	Pass

SPECIAL PRIZES

Governor-General's Medal

A Silver Medal was first offered for annual competition by His Excellency the Governor-General of Canada in 1914. It is awarded each year by the members of the faculty to the student of the graduating class who has attained the highest standing during the two years of his college course. In determining "highest standing," scholar-

ship and leadership in student activities, in the order named, are the deciding factors in making this award. The awards have been:

Connaught Medal

- 1914, Gordon Collingwood, Halifax, N. S.
- 1915, Leslie Wood, Carter's Point, N. B.
- 1916, Walter DeLong, Acaciaville, N.S.

Devonshire Medal

- 1917, Robert M. Wood, Carter's Point, N. B.
- 1918, Stanley Wood, Carter's Point, N. B.
- 1919, Philip Bishop, Greenwich, N.S.
- 1920, Smith A. Hilton, Carleton, N. S.
- 1921, Robert C. Parent, Fredericton, N. B.

Byng Medal

- 1922, Lewis T. Lowther, Kensington, P. E. I.
- 1923, James A. Anderson, S. S. Baddeck, N. S., and Lawrence L. Read, Belleisle Creek, N. B.
- 1924, Donald Putnam, Belmont, N. S.
- 1925, Norman I. Clark, Berwick, N. S.
- 1926, C. V. Marshall, Salem, N. S.

Willingdon Medal

- 1928, M. P. Harrison, Fredericton, N. B.
- 1929, F. W. T. Lucas, London, England.
- 1930, J. G. Stothart, Newcastle, N. B.

Bessborough Medal

- 1931, John E. C. Smith, Shinimicas, N. S.
- 1932, M. B. Moore, Hawkshaw, N. B.
- 1933, Frank D. Crosby, Brenton, N. S.
- 1934, Miles V. Jenkins, Hatfield Point, N. B.
- 1935, A. C. Neish, Port Dufferin, N. S.

Tweedsmuir Medal

- 1936, R. M. Sparkes, Bay Roberts, Newfoundland.
- 1937, T. Starr Pattillo, Truro, N. S.
- 1938, James M. Thomson, Belleisle Creek, N. B.
- 1939, Guy H. Fisk, Middle Musquodoboit, N. S.

ANNUAL BURSARIES

Donated by the Nova Scotia Department of Agriculture To be awarded to "General Course" students

- 1. Applications are invited from Nova Scotia farmers and farmers' sons, 16 years of age or over.
- 2. Applications should be forwarded not later than August 15 to the Principal, Nova Scotia Agricultural College, Truro, preferably

after consultation with the agricultural representative in the district in which the applicant lives, at whose office application forms will be available. Applications received after August 15 will be considered, providing bursaries are available.

- Applicants must have satisfactory school standing—preferably Grade X.
- Each applicant shall be sent a questionnaire to be filled out, respecting his record of activities that would contribute to his qualifications for such a bursary, such as boys' and girls' club work, community work, local leadership, farm background, experience in any other organizations.
- These applications shall be reviewed and approved or rejected not later than September 15, by a central committee, consisting of the Principal of the Agricultural College, the Director of Extension and the Superintendent of Agricultural Associations, and such selection shall be made by them as seems desirable. Where the numbers warrant, applicants may be brought together at central points, such as at club centres or exhibitions, for oral or written tests.
- Bursaries shall be \$100. payable to those who qualify, provided they achieve a satisfactory standing in conduct and progress in the first and second years of the general course, and shall be payable in four instalments, on the completion of each term's work-onequarter of the total to be paid at each time at the end of January and the end of April of each college year of the two-year course.
- Thirty-six annual bursaries will be available, and will be awarded only to applicants who fulfil the qualifications to the satisfaction of the Central Committee. It is hoped that at least two acceptable applications will originate in each county of the province, but in the event of large numbers coming from the more densely populated rural areas, and no acceptable applications from other areas, bursaries will be awarded in order of merit, regardless of geographical location.
- The rules and regulations beginning on page 7 will apply to the accepted candidates.

Macdonald College Scholarship

The Macdonald College scholarship was first offered for annual This scholarship, consisting of free tuition for competition in 1930. two years at Macdonald college and representing a value of \$100, is awarded to the student who attains the highest standing in the work of the second year of the degree course and who continues his The following awards have been made: studies at that College.

1930, W. H. McGibbon, Moore's Mills N. B. 1931, Edgar A. Hilton, Carelton, N. S. 1932, M.J.A. Armstrong, Apohaqui, N. B. 1933, R. J. Hilton, Carleton, N. S. 1934, Miles V. Jenkins, Hatfield Point, N. B.

1935, Arthur C. Neish, Port Dufferin,

N. S. 1936, Don W. Creelman, Brookfield, N.S.

1937, James R. Wright, Riversdale, N.S. 1938, Albert W. MacPhee, The Gore, N. S.

1939, Louis V. Longley Paradise, N.S.

The Alumni Scholarship

At the annual meeting of the N.S.A.C. Alumni Association held at the College, July 5, 1937, it was decided to donate to the College a scholarship of fifty dollars (\$50.00). The purpose of the scholarship is to encourage students to attend the general course and to put to practical use the knowledge gained thereby.

Any first-year student of the general course is eligible to apply for the scholarship. It will be awarded on the basis of character, participation and leadership in community organizations, academic achievements, participation in student activities, and on the merits of a report, to be submitted at the beginning of the senior year, covering any project personally conducted by the student, showing the practical application of the knowledge gained during the junior year.

The student to whom the scholarship will be awarded shall be selected by the scholarship committee appointed annually by the association and their decision shall be final.

The amount of \$50.00 will be payable in two instalments—\$25.00 at the beginning of the second year, and \$25.00 at the beginning of the second year.

Where to Apply—Principal, Nova Scotia Agricultural College, Truro, N. S.

The New Glasgow Rotary Club Scholarship

The members of the New Glasgow Rotary Club have donated an annual scholarship of Fifty Dollars (\$50.00) to be awarded to a Pictou County farm boy for the first year of the General Course. The scholarship will be paid in two instalments of \$25.00 each, at the end of each term of the first college year. The successful candidate will be selected by means of competitions held annually at the Pictou County Exhibition.

The Goodman Company Short Course Bursaries

The Goodman Company of New Glasgow, Antigonish and Truro has donated Fifty Dollars (\$50.00) to be awarded to farm boys and girls from Pictou, Antigonish or Colchester Counties, who take vocational short courses at the Nova Scotia Agricultural College during the 1939-40 college year.

The successful candidates will be selected by means of competitions held at the respective county exhibitions, or at one central point.

Thompson & Sutherland Ltd., Bursaries for Short Courses

Thompson & Sutherland Limited of New Glasgow, Stellarton, Westville and Pictou, has donated a sum of Fifty Dollars (\$50.00) to assist Pictou County farm boys in taking short courses at the Nova Scotia Agricultural College, during the 1939-40 college year.

The successful candidates will be selected by means of competitions held at the Pictou County Exhibition.

(For list of short courses see Page 36)

The T. Eaton Company Prizes

The T. Eaton Company, Maritimes, Limited, very generously offers \$50 for prizes for students doing the best work in the first year of the general course. This will be divided into three prizes of \$25, \$15 and \$10. The 1938-39 winners were:

1st. (\$25.00) — David Ferguson, Scotsburn, N. S.

2nd. (\$15.00) -Woodrow D. Brown, Harvey Station, N. B.

3rd. (\$10.00) -Victor D. Smith, Shinimicas, N. S.

Nova Scotia Department of Agriculture Prizes

The Nova Scotia Department of Agriculture offers \$50 for prizes for students from this province doing the best work in the second year of the general course. This will be divided into three prizes of \$25, \$15 and \$10. The 1938-39 winners were:

1st. (\$25.00) -Guy H. Fisk, Middle Musquodoboit, N. S.

2nd. (\$15.00) -Hugh E. Main, Noel Shore, N. S.

3rd. (\$10.00) -Ronald Roach, Nappan, N. S.

New Brunswick Department of Agriculture Prizes

The New Brunswick Department of Agriculture offers \$50 for prizes for students from that province who do the best work during the first year in any two-year course, and continue the course for the second year. These prizes will be awarded on Commencement Day at the end of the second year. The \$50 will be divided into three prizes of \$25, \$15 and \$10.

Prince Edward Island Department of Agriculture Prizes

The Prince Edward Island Department of Agriculture offers \$50 for prizes for students from that province who do the best work during the first year in any two-year course, and continue the course for the second year. These prizes will be awarded on Commencement Day at the end of the second year. The \$50 will be divided into three prizes of \$25, \$15 and \$10 each. The 1938-39 winner was:

1st. (\$25.00) — James C. Reid, Kinkora, P. E. I.

The Seed Judging Trophy

A group of Prince Edward Island farmers who attended the short course at the N. S. A. C. in 1911, donated a handsome silver

trophy "for competition in seed judging by regular students." The names of the winners have been engraved thereon each succeeding year. The winners, together with their present addresses and occupations, are as follows:

- 1911, W. G. Oulton, Farmer, Windsor, N. S.
- 1912, O. C. Hicks, Superintendent Soils & Crops Division, Fredericton, N. B.
- 1913, R. D. L. Bligh, Assistant Superintendent, Dominion Experimental Station, Kentville, N. S.
- 1914, James Bremner, Secretary, Canadian Jersey Cattle Club, Toronto, Ont.
- 1915, W. R. Retson, Live Stock Representative, Truro, N. S.
- 1916, H. St. Clair Cutten, deceased. (Farmer Lower Truro, N.S.)
- 1918, L. M. Ogilvie, Agricultural Representative, Cadillac, Sask.
- 1919, Douglas Archibald, Newtown, N. S.
- 1920, S. A. Hilton, Assistant Superintendent, Dominion Experimental Farm, Nappan, N. S.
- 1921, D. L. Vincent, Farmer, West New Annan, N. S.
- 1933, M. H. MacLeod, Farmer, Loch Lomond, N. S.
- 1936, W. A. Churchill, Yarmouth, N. S.
- 1937, J. R. MacLean, on home farm, River John, N. S.
- 1938, A. J. Baillie, assistant Agricultural Representative, Baddeck, N. S.
- 1939, Louis V. Longley, on home farm, Paradise, N. S.

HOME STUDY COURSES

In order to help those who are unable to attend the College but who want practical information on farm work, a number of courses will be given by correspondence. These will be given during the winter months. The instruction will be as simple and as complete as possible. Those taking the courses may be required to secure text books and will send in reports and answers to questions regularly to the instructors at the Agricultural College.

The cost of registration will be \$1.00 for each course and the price of the text books. These will be secured by the College at as low a price as possible.

Courses will be given in the following subjects and will consist of approximately twelve lessons each:

- 1. Soils, Fertilizers and Lime.
- 4. Poultry.

2. Field Crops.

- 5. Cooperative Marketing.
- 3. Animal Husbandry-Cattle Feeding. 6. Apiculture.

HOME ECONOMICS

The Department of Agriculture furthers Home Economics Extension for adults through the Women's Institute Division with headquarters at the Agricultural College, Truro, N. S. Further information may be obtained by writing to the Director of Home Economics, Nova Scotia Agricultural College, Truro, N. S.

"HOME CRAFTS" COURSE

A four weeks Course of instruction in the following subjects: Cookery; Nutrition; Sewing; Household Administration; Home Nursing; Miscellaneous.

EXTENSION SERVICES BY THE COLLEGE AND THE DEPARTMENT OF AGRICULTURE

The Extension Service of the Department of Agriculture is located at the College. Cooperating with that department, all staff members are available for the advancement of the application of agricultural science to the farms and homes in rural Nova Scotia. Judges and speakers are supplied for exhibitions, meetings, etc. Visitors are welcomed. Correspondence is invited by all departments.

SHORT COURSES

Eleven short courses are offered in farming and rural life, beginning September 26, 1939, and ending March 15, 1940.

The courses with tentative dates are as follows:

1.	Sept. 26-Oct. 20	Grading of Eggs and Dressed Poultry
2.	Oct. 18-28	Creamerymen
3.	Jan. 3-26	Farm Mechanics
4.	Jan. 9-12	Fur Farming
5.	Jan. 9-Feb. 2	Home Crafts.
6.	Jan. 16-18	Beekeeping
7.	Jan. 30-Feb. 2	Poultry Raising.
8.	Feb. 6-23	Herdsmen
9.	Feb. 20-Mar. 15	Home Crafts
10.	Feb. 27- Mar. 8	Soils, Fertilizers and Crops
11.	Mar. 12-15	Growing Vegetables and Small Fruits

Note: The majority of these short courses are conducted under the joint auspices of the Dominion Department of Labour and the Nova Scotia Department of Agriculture. Candidates within definite age limits and under certain circumstances are entitled to financial assistance.

For further details apply to Principal, Nova Scotia Agricultural College, Truro, N. S.

PROVINCE OF NOVA SCOTIA DEPARTMENT OF AGRICULTURE



NOVA SCOTIA AGRICULTURAL COLLEGE Truro, N.S.

Office of the Principal

July 6, 1939.

To Members of Class '40:

The new calendar, attached herewith, will remind you that registration day is not too far off. We all hope that every member of Class '40 will be with us on that day.

We have endeavored to improve the courses and in some cases slight rearrangements have been made. In the first place, more time has been allowed for examinations. General course students will notice that Farm Management has been dignified by giving it the position of a definite course and arranged to include farm computations, as well as farm accounting. There has also been a slight rearrangement of the poultry courses.

The new Horticulture option is a new arrangement which will have a special appeal to all general course students, and especially to those who are engaged in fruit and vegetable enterprises.

Another point of special concern to senior general course students, is that a course in drainage surveying will be concentrated in the <u>first two weeks</u> of the first term, hence the importance of being present on registration day.

Senior degree students are reminded of the necessity for making the required insect collection, as specified in Entomology course No. 22.

You will be interested to know that we are making some alterations and changes in classroom accommodation, adding some more equipment to the gym, improving the library, adding some new live stock to our herds, and in many respects we shall be in a better position than ever before to give up-to-date instruction.

One source of regret is the departure of Professor A.D. Pickett, who has accepted the appointment to take charge of the Dominion Entomological Laboratory at Annapolis Royal. Dr. J. MacBain Cameron has been appointed to succeed Mr. Pickett as Professor of Entomology and Provincial Entomologist.

It is a bit early to predict enrolment for 1939-40, but we have printed a larger number of calendars than ever before and a special effort will be made to extend to every eligible young man in Nova Scotia particularly, and in the Maritimes as well, an invitation to enrol at the N.S.A.C. Students from outside the Dominion are cordially welcomed under the regulations applying to students from outside Canada.

If you know of any young man in your neighborhood who is eligible for enrolment in either course, but has not yet received a calendar, will you kindly forward his name and address? And, finally, if you have an opportunity, please remind your neighbors of the series of vocational short courses listed on the last page of the calendar. Thanks.

Wishing you a pleasant holiday and assuring you of a warm welcome on October 11 next, I am

Yours very truly,

LTC:LCD

