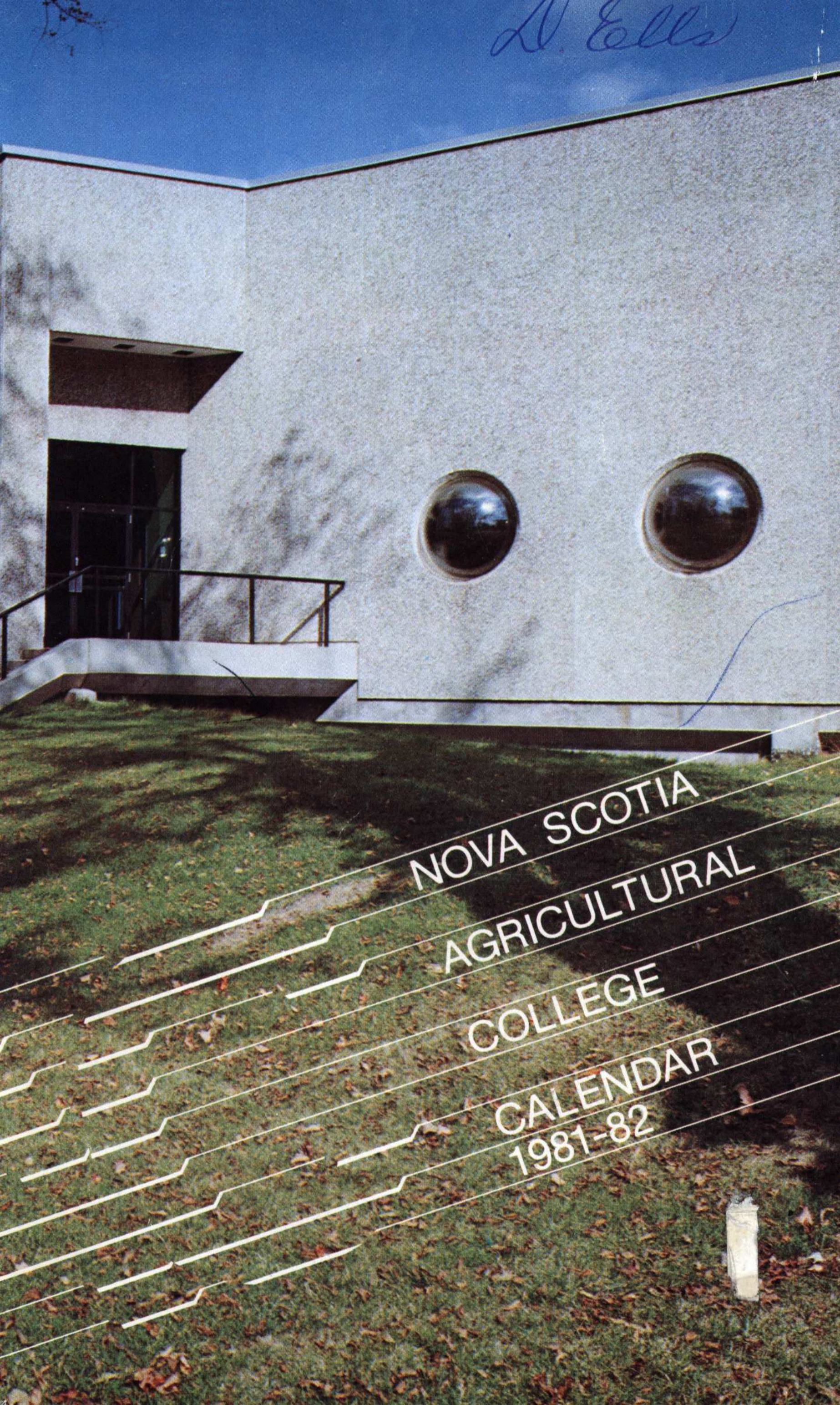


A. Ellis



NOVA SCOTIA
AGRICULTURAL
COLLEGE
CALENDAR
1981-82

Seventy Sixth Annual

CALENDAR

OF THE

NOVA SCOTIA

AGRICULTURAL COLLEGE

TRURO

UNDER

**The Nova Scotia Department
of Agriculture and Marketing**

1981-82

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APPLICATION FOR ADMISSION (1981)
NOVA SCOTIA AGRICULTURAL COLLEGE

Date

Name in full.

Address

Postal Code Telephone No.

Name of Community

Birthdate

Day Month Year

Name of Parents

or

Next of Kin. Relationship

Address

If not in high school during the 1980-1981 school year, what educational institution or institutions have you attended since you were in high school?

Technician:

- | | | |
|------------------------------|------------------|-------------------|
| Agricultural Business — | First year | Second year |
| Agricultural Mechanization — | First year | Second year |
| Animal Science — | First year | Second year |
| Farm Equipment — | First year | Second year |
| Plant Science — | First year | Second year |
| Special — | | |

Technology:

- | | | |
|---------------------------|------------------|-------------------|
| Biology Laboratory — | First year | Second year |
| Chemistry Laboratory — | First year | Second year |
| Farming — | First year | Second year |
| Ornamental Horticulture — | First year | Second year |
| Agricultural — | Final year | |

Degree:

- | | | |
|----------------------------|------------------|-------------------|
| Agricultural Science — | First year | Second year |
| Agricultural Engineering — | First year | Second year |
| Special — | | |

Students who intend to take the **pre-veterinary option** in the Agricultural Science Degree course should indicate this by writing "pre-vet" after First year, Agricultural Science.

Applications will not be considered until a complete (to date) and official transcript of high school marks has been submitted.

Candidates who have attended a post-secondary institution are also required to submit a complete (to date) and official transcript of their record there.

Are you in high school at present?

What high school did you or do you attend?

In submitting this application form, I hereby agree to abide by the rules and regulations of the College.

Signature of Applicant

Signature of Parent or Guardian

(Required only if applicant is under 19)

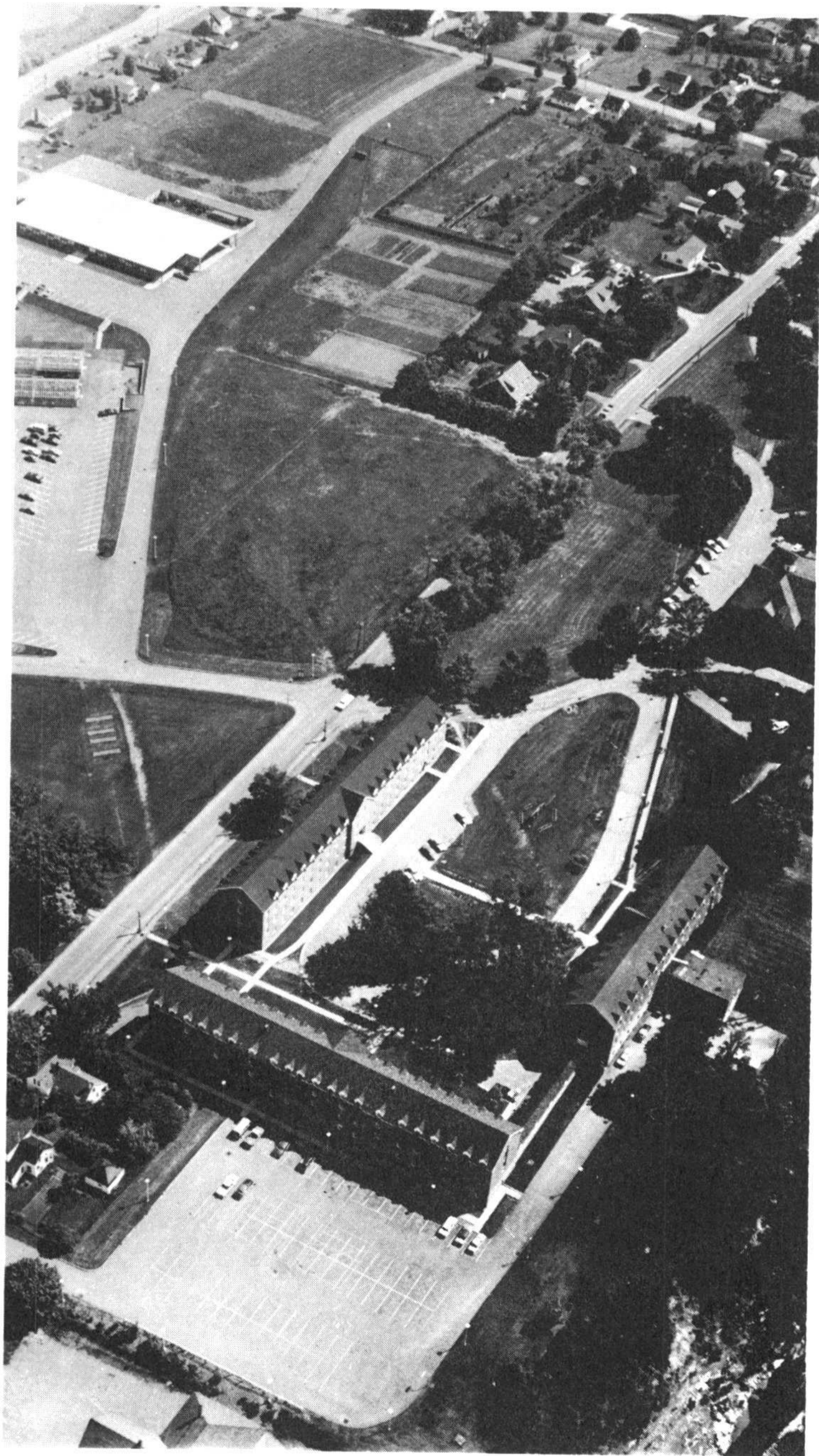
Please complete the reverse side

Please answer the questions below and return form to:
THE REGISTRAR
THE NOVA SCOTIA AGRICULTURAL COLLEGE
TRURO
B2N 5E3

Please check applicable items below in answering the question "Where did you hear about the Nova Scotia Agricultural College?"

Through:

- (a) 4—H.
- (b) School Counsellor
- (c) An Agricultural Representative
- (d) Parents.
- (e) Career Event.
- (f) A Friend
- (g) A Graduate of the College
- (h) Other



GENERAL INFORMATION

1981 Calendar

S M T W T F S	S M T W T F S	S M T W T F S
JULY	AUGUST	SEPTEMBER
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
OCTOBER	NOVEMBER	DECEMBER
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

1982 Calendar

S M T W T F S	S M T W T F S	S M T W T F S
JANUARY	FEBRUARY	MARCH
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
APRIL	MAY	JUNE
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30

CALENDAR FOR SESSION 1981-1982

1981

Sept. 2-4	Supplementary examinations.
Sept. 8	Registration for students registering for the first time.
Sept. 9	Registration for returning students.
Sept. 10	Lectures commence at 8:15 a.m.
October 12	Thanksgiving Day. No classes.
October 29, 30, 31	College Royal (Classes end at 12:40 on Oct. 29)
Nov. 7, 8, 9	Long week-end. No classes.
Dec. 9-19	First semester examinations.

1982

January 4	Second semester lectures commence at 8:15 a.m. Registration for students admitted to pre-tech.
Feb. 20-28	Mid-term break for individual study.
April 9	Good Friday. No examinations.
April 12-23	Second semester examinations.
May 5	Graduation exercises.

Trueman House, Chapman House and Fraser House will be open as follows:

- for students who have to write supplemental examinations, after dinner on September 1.
- for all new students, after dinner on September 7.
- for all other students, after dinner on September 8.

Any student who wishes to use residence facilities before the times set down above will be charged at the rate of \$9.00 per bed-night.

A student who wishes to register late must make the necessary arrangements through the Registrar's Office. Unless the arrangements for late registration are made in time for the applicant to have all first semester payments in the Accounting Office not later than September 9, a penalty of \$10.00 will be imposed for each day of lectures until registration has been completed.

OFFICERS OF ADMINISTRATION

Principal

H.F. MacRAE, B.Sc. (Agr.) (McGill), M.Sc. (McGill), Ph.D. (McGill)

Principal Emeritus

KENNETH COX, B.S.A. (Toronto), M.S.A. (McGill), L.L.D. (McGill)

Vice-Principal

I.M. FRASER, B.Sc. (Dalhousie), M.A. (Maine)

Dean, Vocational and Technical Education

A.D. ELLS, B.Sc. (Agr.) (McGill), M.A. (Acadia)

Registrar

P.Y. HAMILTON, B.Sc. (Agr.) (McGill), M.Sc. (Maine)

Librarian

B.S. SODHI, B.A. (Punjab), M.A. (Punjabi), Dip. L. Sc., (Punjab)

Dean of Students — Chaplain

REV. D.I. MacEACHERN, B.A. (Mt. Allison), M. Div. (Pine Hill)

Deans of Residence

J.M. SMITH, B.P. Ed. (Dalhousie)

S.E. PORTER, B.Sc. (Agr. and Res. Economics) (Maine)

D.W. MacISAAC, B.Sc. (Agr.) (McGill)

Director of Athletics

K.S. MARCHANT, B.P. Ed. (New Brunswick), M.S. (Springfield)

Placement Officer

D.E. MacLEOD, B.A. (Dalhousie), B.Ed. (Acadia)

Business Manager

R.F. McEWAN

Secretary

MRS. A. MARIE HARTIGAN

FACULTY

Principal

H.F. MacRAE, B.Sc. (Agr.) (McGill), M.Sc. (McGill), Ph.D. (McGill)

Agricultural Engineering

✓ *JAMES ADAMS*, B.Sc. (Strathclyde), M.Sc. (Reading)
Associate Professor 50

✓ *G.E. TOWNSEND*, B.Sc. (Agr.) (McGill)
Assistant Professor 55

✓ *J.D. CUNNINGHAM*, B.S.A. (Toronto), B.E. (Nova Scotia Technical College)
Assistant Professor 41

✓ *P.L. HAVARD*, B.Sc. (Agr. Eng.) (McGill), M.Sc. (McGill)
Lecturer 29

✓ *P.F. RICHARD*, B.Sc. (Agr. Eng.) (McGill)
Lecturer 28

✓ *A.G. VERMEULEN*, B.Sc. (Agr. Eng.) (Saskatchewan)
Lecturer 28

Animal Science

✓ L.M. COCK, B.Sc. (Agr.) (McGill), M.S. (Wisconsin), Ph.D. (Maine)
Professor 46

✓ S.L. CURTIS, B.S.A. (Toronto), M.Sc. (Massachusetts), Ph.D. (Minnesota)
Associate Professor 60

P.Y. HAMILTON, B.Sc. (Agr.) (McGill), M.Sc. (Maine)
Associate Professor

✓ W.G. MATHEWSON, B.Sc. (Agr.) (Aberdeen), D.T.A. (Trinidad), M.Sc. (Aberdeen)
Associate Professor 53

✓ D.C. CROBER, B.Sc. (Agr.) (McGill), M.Sc. (McGill), Ph.D. (British Columbia)
Associate Professor 43

✓ A.P. FORBES, B.S. (Animal and Veterinary Sciences) (Maine)
Lecturer 28

✓ J.R. LONG, D.V.M. (Toronto), M.S. (Cornell), Ph.D. (Guelph)
Sessional Lecturer [N.S. Dept. of Agriculture and Marketing] 42

✓ G.W. CHANT, B.S.A. (Guelph) 37
Sessional Lecturer [N.S. Dept. of Agriculture and Marketing]

Biology

✓ L.A. McFADDEN, B.Sc. (Agr.) (McGill), M.Sc. (Cornell), Ph.D. (Cornell)
Professor 55

A.E. ROLAND, B.A. (Acadia), M.A. (Toronto), Ph.D. (Wisconsin), D.Sc. (Acadia), F.A.I.C.
Professor Emeritus

M.E. NEARY, B.Sc. (Agr.) (McGill)
Professor Emeritus

✓ L.J. EATON, B.Sc. (Acadia), M.Sc. (Dalhousie)
Associate Professor 38

✓ L.E. CROSBY, B.Sc. (Acadia), M.Sc. (Acadia)
Assistant Professor 34

✓ R.K. PRANGE, B.Sc. (Acadia), M.Sc. (British Columbia)
Lecturer 35

✓ G.W. STRATTON, B.Sc. (Agr.) (Guelph), M.Sc. (Guelph),
Ph.D. (Guelph) 27
Assistant Professor

Chemistry

✓ W.M. LANGILLE, B.Sc. (Acadia), M.Sc. (McGill)
Associate Professor 55

H.F. MacRAE, B.Sc. (Agr.) (McGill), M.Sc. (McGill), Ph.D.
(McGill)
Principal and Professor

✓ H.M. MacCONNELL, B.Sc. (Agr.) (McGill), M.Sc. (McGill)
Associate Professor 46

✓ K.S. MacLEAN, B.Sc. (Dalhousie), M.Sc. (McGill)
Associate Professor 54

✓ J.E. HAWLEY, B.Sc. (Agr.) (McGill)
Assistant Professor 47

✓ A.S. PAYNE, B.Sc. (Agr.) (McGill), M.Sc. (McGill)
Associate Professor 39

✓ A.R. ROBINSON, B.Sc. (Agr.) (McGill), M.Sc. (McGill),
Ph.D. (McGill)
Assistant Professor 39

✓ J.G. BEKE, B.S.A. (British Columbia), M.Sc. (Manitoba),
Ph.D. (Alberta) 42
Sessional Lecturer [Atlantic Soils Institute]

Economics and Business Management

✓ J.C. TAIT, B.Sc. (Agr.) (McGill), M.Sc. (New Hampshire)
Associate Professor 40

A.D. ELLS, B.Sc. (Agr.) (McGill), M.A. (Acadia)
Associate Professor ~~40~~

✓ D.E. ARNFAST, B.B.A. (St. Francis Xavier)
Assistant Professor 40

✓ S.J.B. STACKHOUSE, B.Sc. (Agr. Ec.) (Guelph), M.Sc.
(Guelph)
Assistant Professor 34

Humanities

- ✓ K.S. MARCHANT, B.P.Ed. (New Brunswick), M.S. (Springfield)
Associate Professor 47
- PARKER COX, B.A. (Acadia), M.A. (Toronto)
Professor Emeritus
- ✓ REV. D.I. MacEACHERN, B.A. (Mt. Allison), M. Div. (Pine Hill)
Associate Professor 47
- ✓ D.E. MacLEOD, B.A. (Dalhousie), B.Ed. (Acadia)
Assistant Professor 51
- ✓ P.M. SANGER, B.A. (Melbourne), B.Ed. (Acadia), M.A. (Victoria)
Assistant Professor 39
- ✓ J.M. SMITH, B.P.Ed. (Dalhousie)
Lecturer 29
- ✓ J.F. MILDON, B.A. (Sussex)
Sessional Lecturer 35

Mathematics and Physics

- ✓ S.G. SMITH, B.Sc. (Mt. Allison), M.Sc. (Windsor)
Associate Professor 46
- ✓ I.M. FRASER, B.Sc. (Dalhousie), M.A. (Maine)
Associate Professor
- ✓ V.L. SAXON, B.Sc. (Dalhousie), M.B.A. (Dalhousie), B.Ed. (Acadia), B.Eng. (N.S. Technical College)
Associate Professor 44
- ✓ C.T. MADIGAN, B.Sc. (Windsor), M.Sc. (Windsor)
Associate Professor 41
- R.V. BUCKLER, B.Sc. (Acadia), B.Ed. (Acadia)
Assistant Professor 54

Plant Science

- ✓ J.S. BUBAR, B.Sc. (Agr.) (McGill), M.S. (Pennsylvania State), Ph.D. (McGill)
Professor 55
- J.E. SHUH, B.S.A. (Toronto), M.Sc. (McGill)
Professor Emeritus

✓ K. PADMANATHAN, B.Sc. (Madras), B.Sc. (Agr.) (Colombo), M.Sc. (Pennsylvania State), Ph.D. (Pennsylvania State)
Professor 55

W. BADCOCK, B.Sc. (Agr.) (McGill), M.Sc. (McGill)
Assistant Professor 50

✓ R.W. DANIELS, B.Sc. (Agr.) (McGill), M.S. (Michigan State)
Associate Professor 39

T.H. HALIBURTON, B.Sc. (Agr.) (McGill), M.S. (Cornell)
Assistant Professor 53

✓ W.J. HIGGINS, B.Sc. (Mt. Allison), M.S. in Ed. (Niagara)
Assistant Professor 36

SCHEDULE OF PAYMENTS

The College reserves the right to make changes without notice in its published scale of charges for tuition, board and lodging, and other fees. Refunds will not be made except as stated below.

These charges are for the regular academic year. Students taking courses or projects in the summer period and who utilize residence facilities will be charged for room and board at the rate of \$52 a week.

All payments are due on the dates stated.

Students who intend to finance their education with Canada Student Loan funds but have not received their Certificate of Eligibility prior to registration must pay the required fee at registration time. Students should, therefore, arrange the necessary temporary financing before their arrival for registration.

DEGREE COURSES

1982

Payment due Sept. 8 (returning students Sept. 9), 1981

Tuition	\$ 375 <i>420</i>
Board and lodging	\$ 780 <i>885</i>
Caution, laboratory and key deposit	\$ 32
Students' Council and athletics	\$ 70
Medical fee	\$ <u>6</u>
	\$1263

+ materials

Books (estimated)	\$ 150 <i>200</i>
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Payment due January 4, 1982

Tuition	\$ 375 <i>420</i>
Board and lodging	\$ 865 <i>990</i>
	\$1240

+ materials

Books (estimated)	\$ 150 <i>200</i>
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It is recommended that every student registering for a Chemistry course purchase and use a laboratory coat. Estimated cost, \$10-\$12.

TECHNICIAN AND TECHNOLOGIST COURSES

Tuition is free to residents of the Atlantic Provinces, the governments of which are sharing operating costs of these Courses. For all other students, tuition fees are \$375 per semester.

Payment due Sept. 8 (returning students Sept. 9), 1981

Board and lodging	\$ 780 <i>885</i>
Caution, laboratory and key deposit	\$ 32
Students' Council and athletics	\$ 70
Medical fee	\$ <u>6</u>
	\$ 888

+ materials

Books (estimated)	\$ 125 <i>175</i>
-------------------------	------------------------------

Payment due January 4, 1982

Board and lodging	\$ 865 <i>990</i>
-------------------------	------------------------------

+ materials

Books (estimated)	\$ 125 <i>175</i>
-------------------------	------------------------------

The United Students' Council has approved a fee of \$6.00 for the medical services fund to be collected from all students at time of registration. The fund provides non-prescription drugs and other supplies for the infirmary. It will not provide for prescription drugs, hospitalization or operations. All doctor's services will be requested by the College Health Service.

Except for health or other compelling compassionate reasons, a student who withdraws after three weeks from the commencement of classes will receive no refund of the tuition fee. For students who withdraw within three weeks from the commencement of classes, the amount of the refund will be 75% of the total tuition fee for a student who withdraws during the first week of classes, 50% for a student who withdraws during the second week, and 25% for a student who withdraws during the third week. A student who withdraws after the first two weeks of the term will receive a refund of the balance of his payment for board but no part of his payment for room rent. (The rate for room rent is \$17.00 per week.)

If a student withdraws during the first week of the academic year, the Students' Council and Medical Services fees will be refunded. After the first week there will be no refund except for a withdrawal for health or other compelling compassionate reasons. After a student has withdrawn, the Students' Medical Fund will have no further responsibility for that person.

RESIDENCE ACCOMMODATIONS

Board and lodging facilities are available for male and female students. Students who wish to reserve a room are required to pay a deposit of \$25.00, returning students before June 30, and new students when they receive their letter of admission to the College. The deposit will be credited to the student's board and lodging account.

An applicant for whom a room has been reserved and who finds it necessary to cancel his reservation will be refunded his deposit, provided that notice of cancellation reaches the Registrar's Office not later than September 1.

CAUTION AND LABORATORY DEPOSIT

Every student, at time of registration, must make a cash deposit of \$32.00 with the Registrar to cover breakage.

Damage to floors, walls, doors, windows, lighting or furniture in any bedroom will be charged to the occupants of the room in equal shares, and damage to the common parts of the College and residences will be charged to the entire student body if the offender is not charged and punished. The sum charged in any case will be in excess of the amount necessary to repair the damage.

All caution deposits are subject to a general levy through the office of the Dean of Students for untraceable breakage and damage to buildings and equipment.

This fee, less deductions, will be refunded before the beginning of the next college year.

CANADA STUDENT LOANS PLAN

The Government of Canada makes available to eligible students enrolled in the Degree and Technical Courses, loans and bursaries totaling more than \$3000 for a student in one year. Application for a Certificate of Eligibility must be made to the issuing authority of the province of residence of the applicant.

Borrowers under the plan are required to repay principal and pay interest, but no payments are required as long as they are full time students at a specified post-secondary educational institution.

Application forms are available as follows:

Nova Scotia students	— Department of Education Box 578 Halifax, N.S. B3J 2S9
New Brunswick students	— Department of Youth Centennial Building Fredericton, N.B. E3B 5H1
Prince Edward Island students	— Department of Education Box 2000 Charlottetown, P.E.I. C1A 7N8

Newfoundland students — Department of Education
Confederation Building
St. John's, Nfld.
A1C 5R9

The application should be completed and filed with the issuing authority during the early summer, so that there will be time for the issuing of an eligibility form before Registration Day. The applicant will then present the Certificate of Eligibility at the time of registration. Having had it signed by the Registrar, the student may take it to any bank to arrange for funds.

Living Allowance for P.E.I. Students

A living allowance of \$15.00 per week will be provided for Prince Edward Island students in good standing from Federal-Provincial funds if an application is made to the Director of Rural Development, Department of Agriculture and Forestry, Charlottetown, at as early a date as possible. Students who, at registration, present a letter from the above Department, indicating eligibility for assistance, are credited with this allowance.

Canadian Army Welfare Fund Bursaries

Bursaries of up to \$1,000 annually may be awarded to dependents of former members of the Canadian Army who enter the degree, technician, or technology courses at NSAC.

Financial need is the determining factor in the selection of recipients.

Applications are obtained from the Manager, Canadian Army Welfare Fund, East Memorial Building, Wellington Street, Ottawa, K1A 0P4.

Applications must be submitted by July 1.

Refund for New Brunswick Students

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 will be made at the close of the second term, provided that they have passed the requirements for the year. No application is necessary.

GENERAL INFORMATION

The Nova Scotia Agricultural College was formally opened in 1905 to assume and expand the work which for several years had been carried on by the School of Horticulture in Wolfville and the School of Agriculture in Truro. The College operates under authority of an Act of the Legislature of Nova Scotia.

Over the years instruction has been offered at various levels: among them credits towards a degree in Agriculture, semi-vocational courses, technical courses, and vocational short courses. In 1981-1982 credits towards a science degree in Agriculture, an engineering degree in Agriculture, a pre-veterinarian course, five technician courses, five technology courses and numerous vocational short courses will be offered.

During the seventy-six years of its existence the Nova Scotia Agricultural College has had very close affiliations with the Ontario Agricultural College of the University of Guelph and Macdonald College of McGill University, at which institutions most of its graduates from the Degree Course have completed the studies for a degree. It now offers two years of a four-year course in Agricultural Science and two years of a four-year course in Agricultural Engineering.

In 1980, its 75th Anniversary, NSAC received approval to offer all four years of the B.Sc. (Agr.) degree course. Plans for appropriate expansion have begun and students who enter NSAC to begin the B.Sc. (Agr.) course in 1981 may be able to complete the four years at NSAC

Students who take the one-year pre-veterinary course and are successful, apply for admission to the University of Guelph to continue in the course leading to Doctor of Veterinary Medicine. Those not admitted for the Veterinary program may enter the second year of the Agricultural Science Degree course at NSAC and proceed in the program leading to a B.Sc. (Agr.).

Graduates of the pre-engineering course at the Nova Scotia Agricultural College will be admitted without further ex-

amination by the Technical University of Nova Scotia to the course leading to the degree of Bachelor of Engineering with specialization in Agricultural Engineering. Graduates may also be admitted to the third year of Agricultural Engineering at other Universities.

To the students who wish to farm, to accept employment in a farm-related industry, or to engage in professional agriculture, the College offers courses designed to better fit them for the line of endeavour they wish to follow.

Agriculture offers to the alert person the widest possible field for study and opportunity. Its problems are a challenge to the keenest minds that can be brought to bear upon them, and it offers to many a young person the possibility of a career that will bring opportunity for useful service and distinction.

The record of the graduates of this institution, over the seventy-six years the College has been in existence, is conclusive evidence that students can obtain a sound agricultural education in the courses offered at the Nova Scotia Agricultural College, located on a 550 acre property at Bible Hill, a mile northeast of Truro, Nova Scotia.

The College is well equipped with buildings. Cumming Hall, Harlow Institute, Agricultural Engineering Building, Collins



Horticultural Building, Dairy Building, Cox Institute of Agricultural Technology, Boulden Building, Agricultural Mechanics Building, Hancock Veterinary Building and a modern farm building complex provide adequate teaching facilities for all subjects offered and offices and laboratories for a large proportion of the staff of the Nova Scotia Department of Agriculture and Marketing. Fraser House, Trueman House, Chapman House and Jenkins Hall provide living and dining accommodations for male and female students. Among recent additions are a complete and modern Athletic Centre, and, opened on the 75th anniversary year, the Alumni Theatre.

The various courses arranged for the 1981-82 college year are listed and described elsewhere in the Calendar. The Faculty reserves the right to make any revisions and additions that may be found necessary.

The Faculty reserves the right to withhold any first year courses for which less than five students apply.

The Faculty will give sympathetic consideration to any student who wishes to take a special selection of courses in order to fill a specific need. The choice of subjects will be limited to those that do not conflict when scheduled.

Students may write examinations in either of the two official languages of Canada.

Post Office Address:

All mail should be addressed:
Nova Scotia Agricultural College,
P.O. Box 550, Truro, N.S. B2N 5E3

Telephone:

Nova Scotia Agricultural College, Truro, 902-895-1571

Banks:

The following chartered banks have branches in Truro:
The Bank of Nova Scotia
The Bank of Montreal
The Canadian Imperial Bank of Commerce

The Royal Bank of Canada
The Toronto-Dominion Bank
The Bank of Montreal, Bible Hill

Telegrams:

Offices of Canadian National-Canadian Pacific Telecommunications are located in Truro.

Address all telegrams in care of:

Nova Scotia Agricultural College, Truro, N.S.

Express and Freight:

Express or freight may be forwarded to the Nova Scotia Agricultural College by either the Canadian National Railways or the Canadian Pacific Railways, since both lines maintain offices in Truro.

College Colors:

Royal Blue and Regular Gold

Churches:

In the communities of Truro and Bible Hill there are churches representing a wide range of denominational interests.

Chaplaincy:

Rev. Douglas MacEachern is Chaplain and Dean of Students. He works in close co-operation with the Executive of the United Students' Council and the Chapel Committee. The Chaplaincy is concerned with the spiritual needs of the students and the development of a religious program, often in conjunction with churches in the community.

THE COLLEGE WINTER FAIR

During each College year, the students put on a College Winter Fair, or College Royal, as it is frequently called. The show is a competition in fitting and showmanship rather than in the quality of the horses, cattle, sheep, swine and poultry shown in the exhibition.

In addition to livestock classes, the show also features competition in Agronomy, Horticulture and Farm Management and a series of educational demonstration booths.

The program and show are administered by students who hold the various offices necessary for the satisfactory operation of an exhibition.

THE ANIMAL SCIENCE CLUB

Students interested in animal studies are welcome to join and take part in the Animal Science Club. The activities of this student-operated club include visits to livestock operations, meetings and special guests on livestock topics and livestock evaluation studies and competitions.

A major project of the club is the selection and training of a livestock evaluation "team" to take part in the livestock evaluation competition at the Royal Winter Fair in Toronto.

STUDENT PLACEMENT SERVICE

The Nova Scotia Agricultural College provides facilities and personnel to assist graduates and undergraduates to obtain part-time, summer, and permanent employment.

The Placement Officer contacts representatives of industry, business and government to arrange for on- and off-campus recruitment of students.

Individual counselling related to career planning and employment information associated with agriculture is available. Students are informed of employment opportunities in the College newspaper and by notices circulated on bulletin boards at various locations on campus. Information on career planning and potential employers is also available at the Placement Office and College Library.

RULES AND REGULATIONS

GENERAL REGULATIONS

All students are under the charge of the Principal and are responsible to him at all times for their conduct. The Principal is authorized to make such additional regulations as may be found necessary for the discipline of the College and to impose fines or other penalties for any infraction of rules and regulations.

All students are expected to attend all lectures, discussion groups, and laboratory periods, whether scheduled on the timetable or announced by the instructor. The members of the Faculty believe that a student for his own good should miss as few instructional periods as possible.

Students wishing to absent themselves from classes for compassionate reasons must obtain permission from the Registrar or, in his absence, the Dean of Students.

A student who arrives late for class may be refused admission.

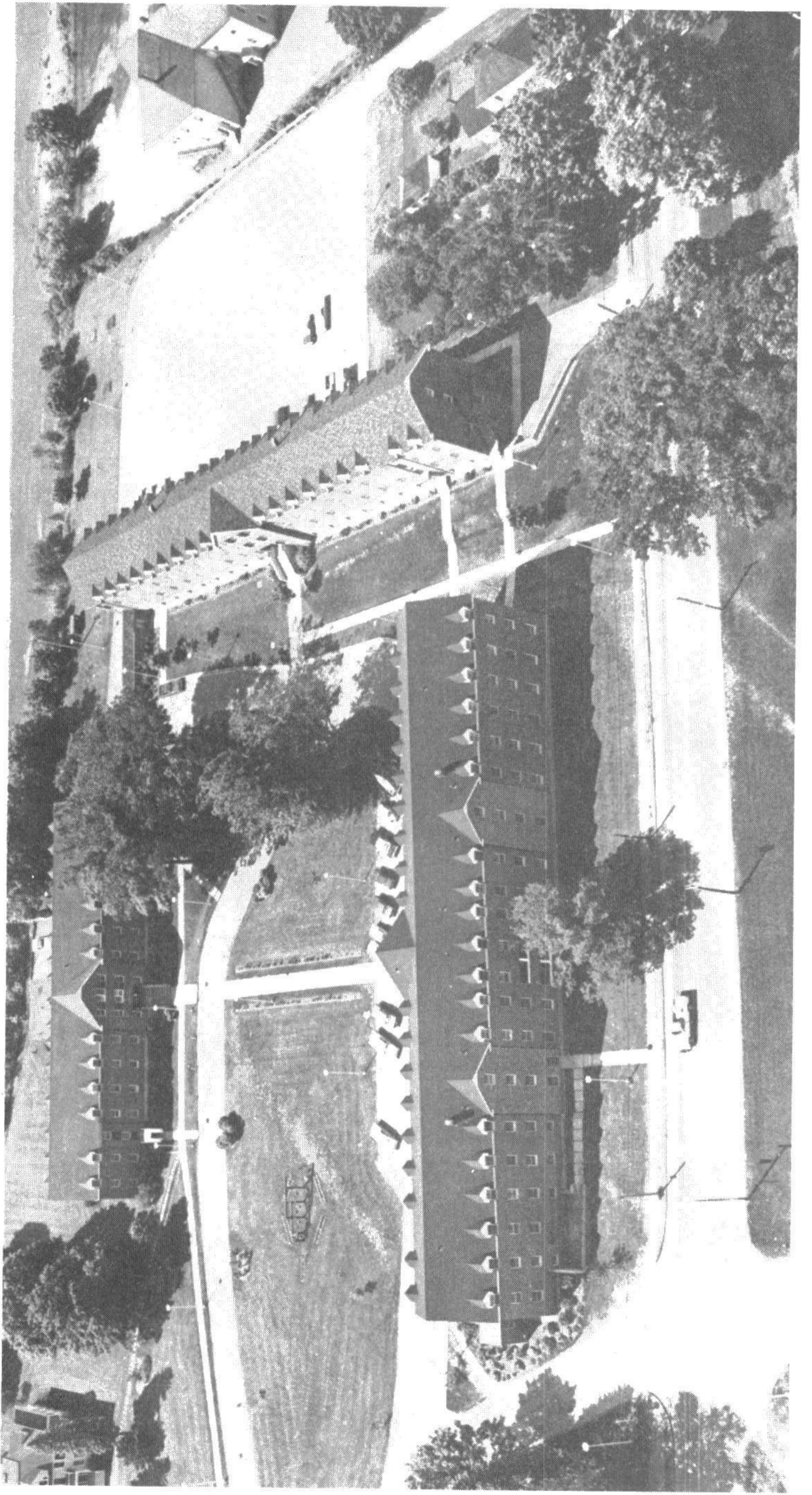
A student may, at the discretion of the instructor, be permitted to audit a course. The privilege may be withdrawn by the instructor at any time while the course is in progress. Students who are granted auditing privileges are not permitted to write tests, examinations or to be otherwise evaluated in the course audited.

All illness must be reported through the nurse to the Registrar's Office.

Tampering with fire protection equipment is forbidden.

Students must not destroy, deface, or meddle with College property.

Every student is expected to show, both within and without the College, such respect for order, morality and the rights of others and such sense of personal honour as is demanded of good citizens. Students found guilty of immoral, dishonest or improper conduct, violation of rules, or failure to make



satisfactory progress, shall be liable to College discipline including: suspension from classes or residence, disqualification from competing for honours or prizes, or withdrawal from the College.

Smoking is not allowed in classrooms or laboratories during regular class and laboratory hours, in the Dining Hall, the Athletic Centre, or the Alumni Theatre, at any time.

Any form of disorderly conduct, drunkenness, or public display of intoxicating beverages is forbidden on campus and at all College functions.

Firearms which are to be kept on campus must be left at the owner's risk in the custody of the Dean of Students.

Students are required to participate in approved orientation activities. All forms of initiation and hazing are forbidden.

Students found in unauthorized places on campus may be subject to immediate expulsion.

RESIDENCE REGULATIONS

Residence Regulations are to be found in the Student Handbook, a copy of which will be distributed to all students.

Students living out of residence must obey all residence rules and regulations while visiting in the residences.

Students will be required to provide their own towels, soap and drinking glass. Sheets, pillow, pillow cases, blankets and furniture will be provided by the College.

Students wishing accommodation for overnight visitors in a residence must obtain permission from the Dean of Students.

Single meals may be purchased by paying the cashier at the front end of the cafeteria line.

USE OF MOTOR VEHICLES

The operation of a motor vehicle while in residence at the College is a privilege which may be withdrawn at the discretion of the Principal.

Students in residence who bring motor vehicles to the campus or those who live in the surrounding area and are desirous of parking their vehicle on campus must register the ownership of the vehicle, together with its license number, with the grounds superintendent or a body appointed by the Principal, at the opening of the academic year, or within three days after the vehicle is brought to campus.

Students are required to observe campus traffic and parking regulations. Fines are levied by the Principal or an appointed body for failure to comply with these regulations.

TRAFFIC AND PARKING REGULATIONS

1. Any member of the College community — faculty, staff or student — who wishes to bring a vehicle on campus must have it registered.

2. Students will register vehicles at the time of registration and receive a sticker which is to be displayed on the lower right hand corner of the rear window of the vehicle. A \$10.00 fee is charged for registration. Vehicles brought to campus during the year will be registered with the Traffic Control Committee.

3. Off-campus students bringing vehicles to the campus will register their vehicles and park in their designated area and are subject to the same regulation as on-campus students.

4. Faculty and staff will obtain registration forms and stickers from the Traffic Control Committee.

5. The specified parking areas which are to be used are noted on campus maps and by signs at parking locations.

6. The on-campus student parking areas are designated as:

(a) behind Chapman House

(b) beside poultry building

All other areas which comprise the N.S.A.C. area are off limits to in-residence student parking.

7. The parking and traffic regulations will be enforced by the Traffic Control Committee, Resident Deans, Grounds Superintendent and Student Monitors.

8. Vehicles parked in unauthorized areas will be towed away at the owner's expense.

MEDICAL EXAMINATION

New students at time of registration must be in possession of a medical certificate dated not more than 30 days previous to registration. If required, students must submit to further medical examinations upon request.

All candidates who are accepted will be sent a medical report form; should the form not be sent to the student with the letter of final acceptance, the candidate for admission should ask for one.

CONTAGIOUS OR INFECTIVE DISEASES

Students on holiday or accepted candidates for admission who become subject to an attack of any contagious or infective disease, or who reside in any dwelling in which any such disease exists, shall be subject to quarantine regulations approved by the medical profession.

In all cases of students, or accepted candidates for admission, suffering from, or coming in contact with those suffering from any contagious or infective disease, a medical certificate shall be required before they are allowed to return to the College.

STUDENT GOVERNMENT

Through a system of self-government students are encouraged to accept the greatest possible amount of responsibility in connection with their own affairs. Only full-time students taking regular courses are allowed to act as executive members of the Students' Council, or as members of student committees.

A committee of Faculty members, appointed by the Faculty to act in an advisory capacity, cooperates with student committees on financial, literary, social and athletic affairs in order that every possible benefit may be derived from such activities.

SOCIAL

All social activities on the campus are supervised by a committee appointed by the United Students' Council. Informal dances and other social functions are held from time to time.

ATHLETICS

The athletic program involves the following:

(a) Intramural athletics. The intramural program continues through the year with units of competition including softball, soccer, hockey, basketball, volleyball, badminton, curling, table tennis, racquet ball, squash, handball, and cross-country skiing. Competition may be by class or residence floor, by a league draft system or co-ed.

(b) Intercollegiate Athletics: The men's and women's division of athletics compete in the Nova Scotia College Conference. Field hockey, soccer, volleyball, basketball, hockey and badminton, are the major team sports of this five team league. The College is a member of the Canadian Colleges Athletic Association, a national body, promoting competition for non-degree granting colleges. The College also competes in annual Woodsmen meets at UNB and Macdonald College.

ATHLETIC REGULATIONS

All students are eligible to play for teams representing the College, subject to conditions established by the NSAC and the Canadian Colleges Athletic Association.

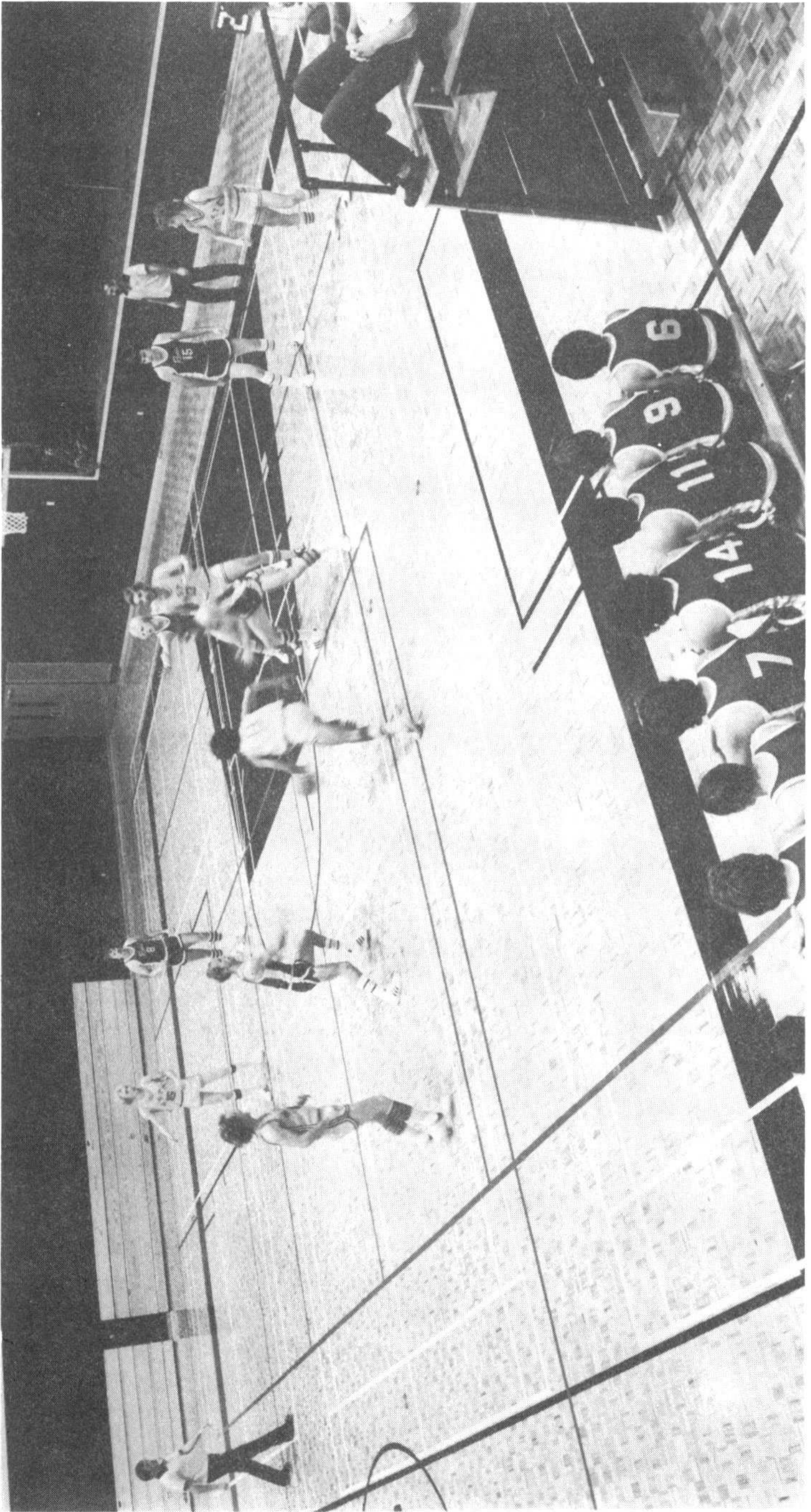
All teams or groups that go to any community or institution to participate in athletic or other activities must be accompanied by a member of the College staff.

OUTSIDE SPORTS

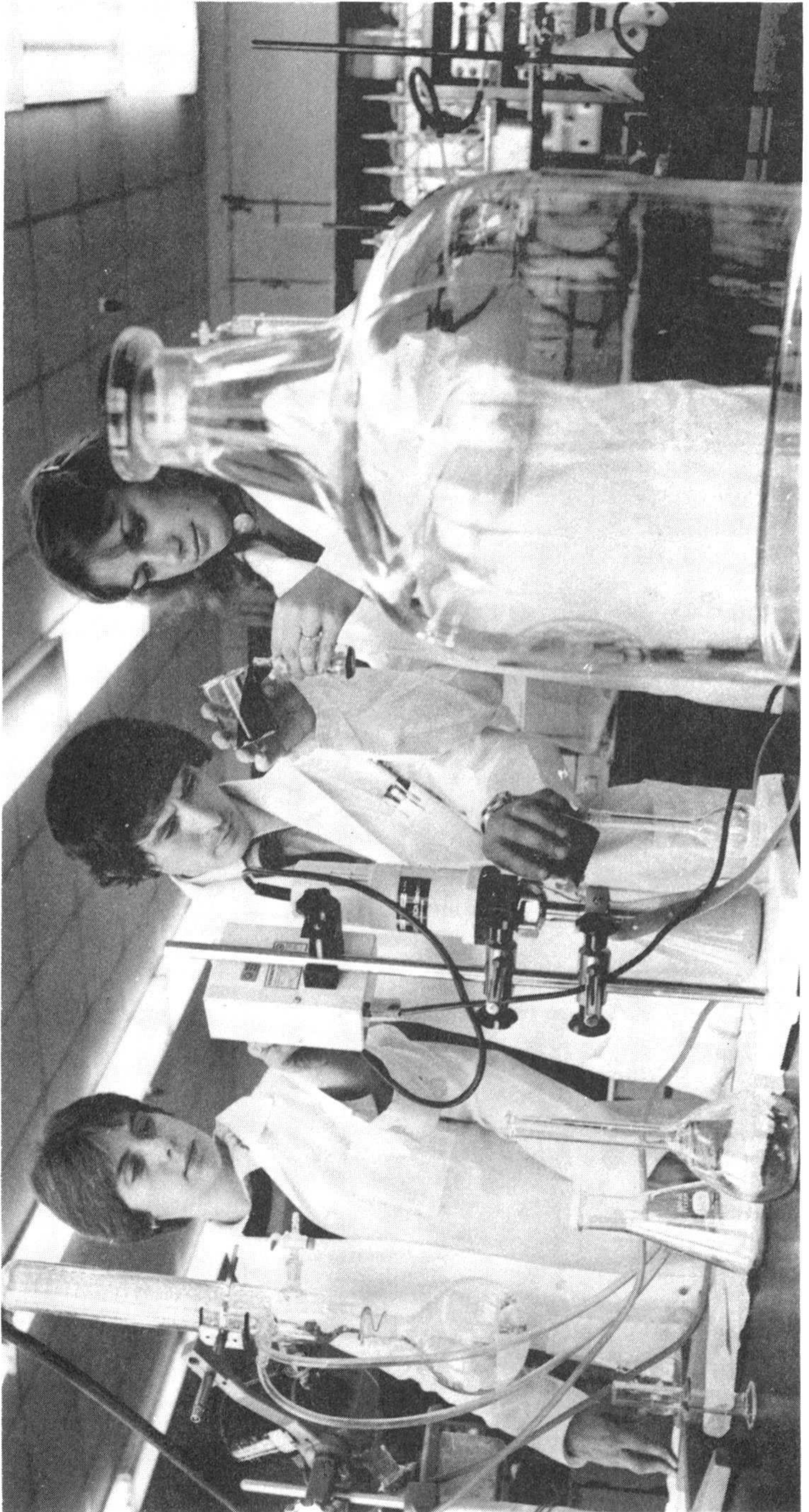
A student wishing to participate in athletics other than those sponsored by the College must apply in writing to, and obtain permission from, the Principal before participating either as a player or an official.

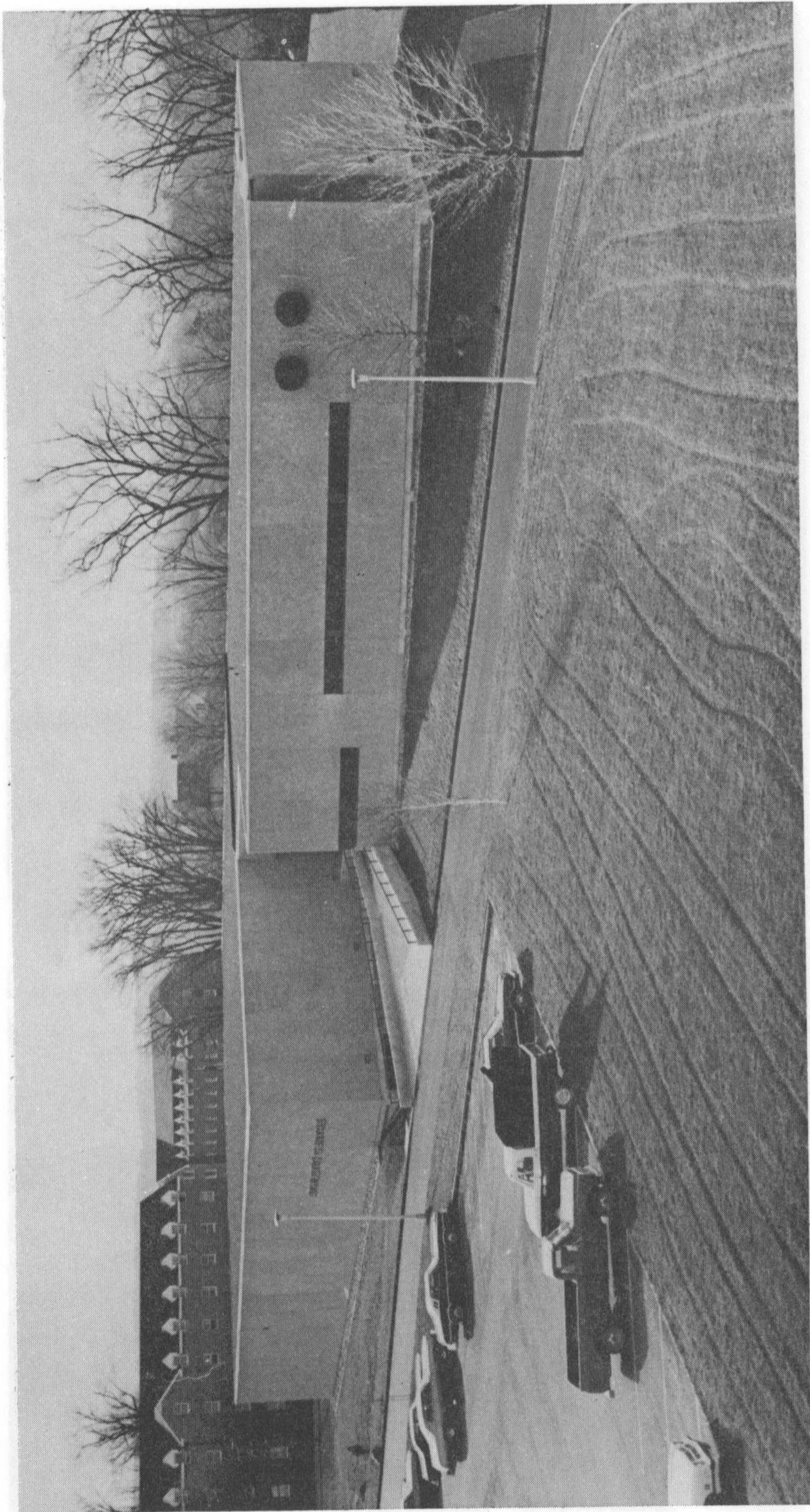
Any expenses incurred through injury while playing in outside games will be the responsibility of the student concerned, and will not be the responsibility of the students' medical fund.

Students who lose time from classes due to participating in outside games will not receive an attendance credit for the time lost.









DEGREE COURSES

The Nova Scotia Agricultural College offers the first two years of a four-year course leading to a degree in Agricultural Science (B.Sc. (Agr.)) and the first two years of a four-year course leading to a degree in Agricultural Engineering (B.E. (Agr.)). Most of its graduates in Agricultural Science complete the work for a degree at Macdonald College of McGill University, the University of Guelph or the University of Maine. Most of its graduates in Agricultural Engineering proceed to the Technical University of Nova Scotia or Macdonald College for the final two years.

NSAC also offers a one-year Pre-Veterinary course for students from the Atlantic Provinces who intend to apply for admission to the program leading to Doctor of Veterinary Medicine at the University of Guelph. Those students who are successful in passing this one-year program at NSAC but are not admitted to the Veterinary program, continue at NSAC in the second year of the Agricultural Science Degree course.

Graduates in Agricultural Science may choose from a wide variety of disciplines in their final two years of the B.Sc. (Agr.) program: economics, the pure sciences, agricultural science, the environmental sciences and food sciences. For B.Sc. (Agr.) degree graduates in good standing, there are usually opportunities to take graduate studies through Assistantships leading to a Masters or Doctors (Ph.D.) degree.

Students in the Agricultural Science and Engineering courses at NSAC who complete the prescribed number of credits with no mark below 50% of the maximum mark obtainable and who are in good standing will be granted a Degree Course Diploma. The Diploma confers upon recipients the status of "Associate of the Nova Scotia Agricultural College."

In Agricultural Science and Agricultural Engineering, a high honours diploma will be awarded to a student who has attained an average of 80% or better on the work of the two years and an honours diploma to one who has attained an average of at least 75%.

Entrance Requirements

All candidates for admission to the Agricultural Science Degree course must present certificates showing an average of at least 60% with no mark below 50% in Grade XII (Nova

Scotia 012; New Brunswick 121 or 122; Prince Edward Island University preparatory or their equivalent) English, Mathematics, Chemistry, Biology or Physics and one additional subject.

All candidates for admission to the Agricultural Engineering Degree course must present certificates showing an average of at least 60% with no mark below 50% in Grade XII (Nova Scotia 012; New Brunswick 121 or 122; Prince Edward Island University preparatory or their equivalent) English, Mathematics, Chemistry, Physics and one other subject (preferably Biology).

All candidates for admission to the one-year Pre-Veterinary course must present certificates showing an average of at least 60% with no mark below 50% in Grade XII (Nova Scotia 012; New Brunswick 121 or 122; Prince Edward Island University preparatory or their equivalent) English, Mathematics, Chemistry, and Physics.

All candidates must present a satisfactory medical certificate dated not more than thirty days prior to registration.

Graduates of Newfoundland Grade XI will be required to complete, with an average of at least 60%, an academic year in advance of that year in the subjects indicated above.

Supplemental Examinations

A student who has made an average of at least 50% and has passed at least half of the subjects taken may write one supplemental examination in each failed subject in which the mark is 35% or higher. The supplemental examination (or examinations) must be written in either June or September immediately following. A student in final year may write one supplemental examination in January if the passing of that examination, and success with all final semester examinations, can make the student eligible for graduation.

Application for permission to write a supplemental examination in June must be submitted before June 5 and for permission to write in September, before August 18.

The fee for a supplemental examination will be \$10. No supplemental examination is to be written until the required fee has been paid. If a student does not show to write a supplemental examination, the fee is forfeited. Should a candidate for a supplemental examination not give notice and

pay the required fee on time, but arrive to write an examination, permission to write may be granted at the discretion of the Registrar and the instructor, and upon the payment by the candidate of \$20 per examination.

Academic Standing

All students are assessed at the end of each semester. Those with failing averages (less than 50%) or failures in half or more of the subjects in which they are registered may be required to terminate their studies.

Key to Identification and Scheduling of Subjects

The subjects listed in the following syllabi of courses and in the descriptions of subjects beginning on page 60 are identified as to discipline and approximate academic level by letter and number codes. The disciplines are coded as follows:

Agricultural Engineering	AE	Economics and Business	EB
Animal Science	AS	Humanities	H
Biology	B	Mathematics and Physics	MP
Chemistry	C	Plant Science	PS

All subjects with numbers of 100 or over are degree credit. Most subjects with numbers between 100 and 190 inclusive are part of the first year of the curriculum and numbers 200 to 290 inclusive part of the second year. Thus B100 is a Biology course offered in first year of the degree course curriculum. EB250 is an Economics and Business course offered in the second year of the curriculum. Both courses are credits toward a B.Sc. (Agr.) degree.

Subjects with numbers between 10 and 80 are offered in one or more of the Technician and/or Technology courses. In general, the number indicates the level at which the subject is offered in the program of study. For example, C12 is a Chemistry subject usually offered in the first year, first semester of the Technician courses. PS49 is a Plant Science subject offered in the second year, second semester of some of the Technician courses. B71 is a Biology subject offered in the second year, second semester of the Chemistry Laboratory Technology course.

SYLLABUS AGRICULTURAL SCIENCE

The requirements for a diploma is successful completion of Semesters I and II, the English course H205 in Semester IV, and sufficient additional credits to make up a total of at least sixty-two credits. The same requirement, with the appropriate selection of subjects in second year, prepares students for admission to the third year in any one of several options of the B.Sc. (Agr.) courses at the University of Guelph, Macdonald College of McGill University or the University of Maine (see page 33). Students admitted to the first year of this course in the fall of 1981 may be able to complete the third and fourth years of the courses at NSAC.

SEMESTER I

		Credits
B100	The Plant Kingdom	3
C100	Chemical Principles	3
H200	Technical Writing and English and American Authors	3
MP100	Calculus and Analytic Geometry I	3
PS100	Principles of Crop Production	3
*MP090	Introductory Physics	

*MP090 will be taken unless the student has completed this subject at the Grade XII (N.S., N.B., P.E.I.) level or its equivalent.

SEMESTER II

AS100	Introductory Animal Science	3
B110	The Animal Kingdom	3
C110	Organic Chemistry	3
EB110	Economics of Agriculture	3
MP105	Calculus and Analytic Geometry II	3
MP110	Modern Physics	3

A student who successfully completes the first two semesters will normally take 5 or 6 subjects in each of the third and fourth semesters. The selection of subjects will depend on the area of specialization the student intends to follow, and will be limited to those subjects which do not present conflicts in the timetable.

SEMESTER III

AS210	Selected Studies in Animal Science	3
B200	Cell Biology	3
B240	Introduction to Genetics	3
B255	Plant Protection	3
B270	Principles of Ecology	3
C200	Biochemistry I	3
C220	Introduction to Soil Science	3
EB200	Principles of Economics—Micro	3
EB210	Accounting	3
EB230	Principles of Marketing	3
EB240	Farm Management	3
H120	Sociology I	3
H140	Personnel Management	3
MP200	Statistics and Agricultural Experimentation	3
MP220	Computer Programming	3

SEMESTER IV

AE220	Agricultural Structures	2
AE230	Agricultural Mechanization	2
B225	Microbiology	3
B245	Agricultural Genetics	3
B260	Plant Physiology	3
C205	Biochemistry II	3
EB220	Production Economics	3
EB255	Macro Economics	3
EB260	Quantitative Economics	3
H125	Sociology II	3
H140	Personnel Management	3
H150	Agriculture Today	3
H205	Canadian Literature	3
H210	Communications and Extension Methods	3
H220	Basic French	3
MP200	Statistics and Agricultural Experimentation	3
PS200	Greenhouse Crop Production and Floriculture	3
AE260	Surveying (follows winter semester)	2

SYLLABUS AGRICULTURAL ENGINEERING

The requirement for a diploma is successful completion of all courses listed. Graduates are admitted to the third year of the Bachelor of Engineering course at the Technical University of Nova Scotia. Graduates may also be admitted to the third year of Engineering at other Universities.

SEMESTER I

		Credits
AE100	Graphics and Projection	3
AE110	Statics	3
C120	Engineering Chemistry I	3
H200	Technical Writing and English and American Authors	3
MP100	Calculus and Analytic Geometry	3
PS100	Principles of Crop Production	3

SEMESTER II

AE105	Graphics and Design	3
AE120	Dynamics	3
AE260	Surveying	2
C125	Engineering Chemistry II	3
EB110	Economics of Agriculture	3
MP106	Calculus for Engineers	3
MP120	Electrical Phenomena	3

SEMESTER III

AE225	Thermodynamics	3
AE240	Material Science	3
AS220	Animal Science	2
B220	Microbiology for Engineers	3
MP220	Computer Programming	3
MP230	Multivariable Calculus	3
MP240	Electric Circuits	3

SEMESTER IV

AE220	Agricultural Structures	3
AE230	Agricultural Mechanization	2
AE245	Strength of Materials	3
AE250	Fluid Mechanics	3
EB255	Macro Economics	3

H205	Canadian Literature	3
MP235	Differential Equations and Linear Algebra	3

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SYLLABUS PRE-VETERINARY MEDICINE

Students who wish to attempt a program of study that can lead to a degree in Veterinary Medicine take the degree course subjects listed below. Only applicants that have successfully completed two years in each of the Science subjects (Chemistry and Physics), in addition to Mathematics and English, at the University preparation Grade XII level can complete this program of study in one year.

SEMESTER I

		Credits
B100	The Plant Kingdom	3
C100	Chemical Principles	3
H200	Technical Writing and English and American Authors	3
MP100	Calculus and Analytic Geometry I	3
MP130	Physics for Life Science I	3

SEMESTER II

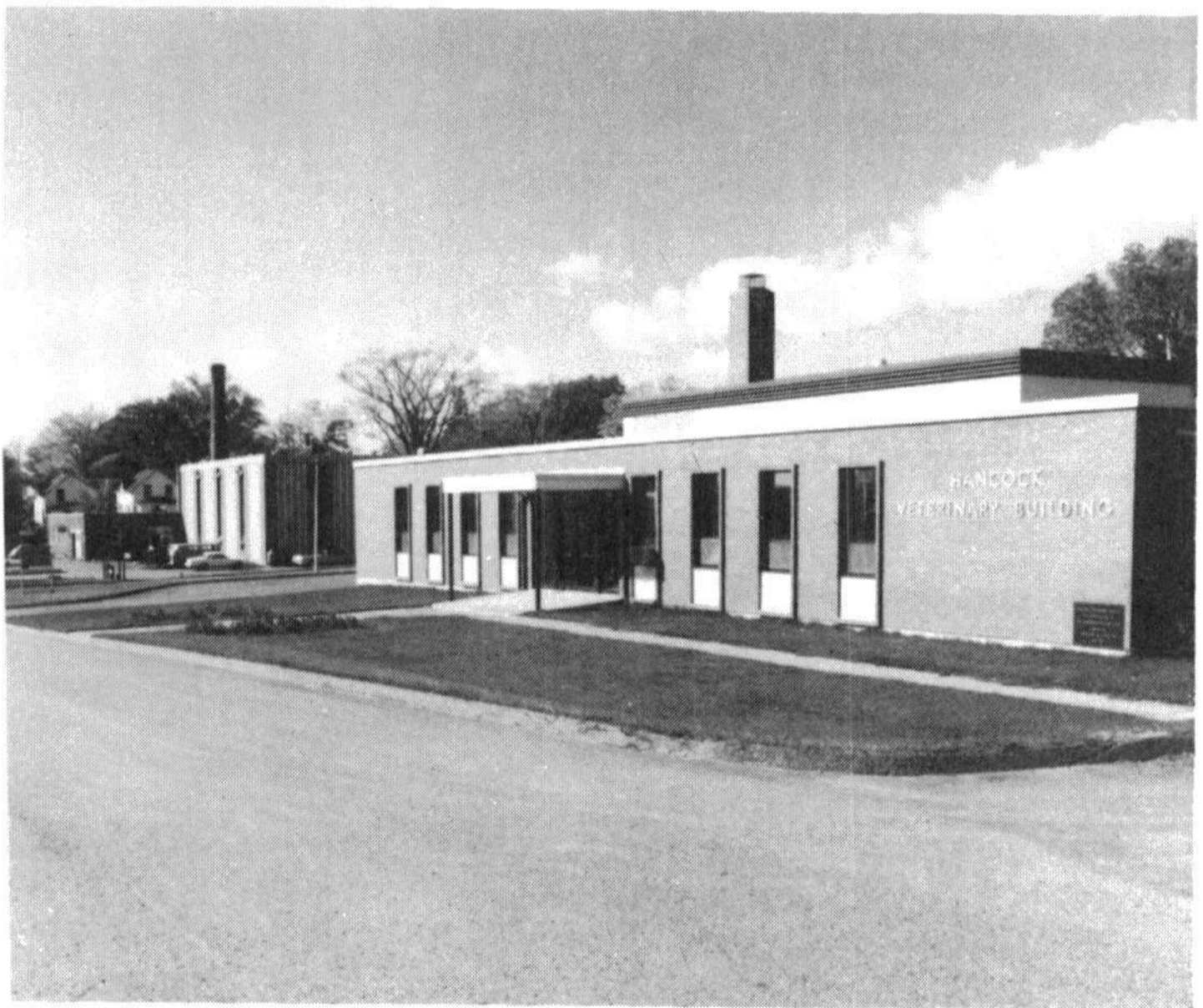
AS100	Introductory Animal Science	3
B110	The Animal Kingdom	3
C110	Organic Chemistry	3
EB110	Economics of Agriculture	3
MP105	Calculus and Analytic Geometry II	3
MP135	Physics for Life Science II	3

The selection of students for admission to the Pre-Veterinary year of study at the University of Guelph occurs at NSAC during or after successful completion of the above program. An average of 75% or higher is required to assure consideration by the selection committee.

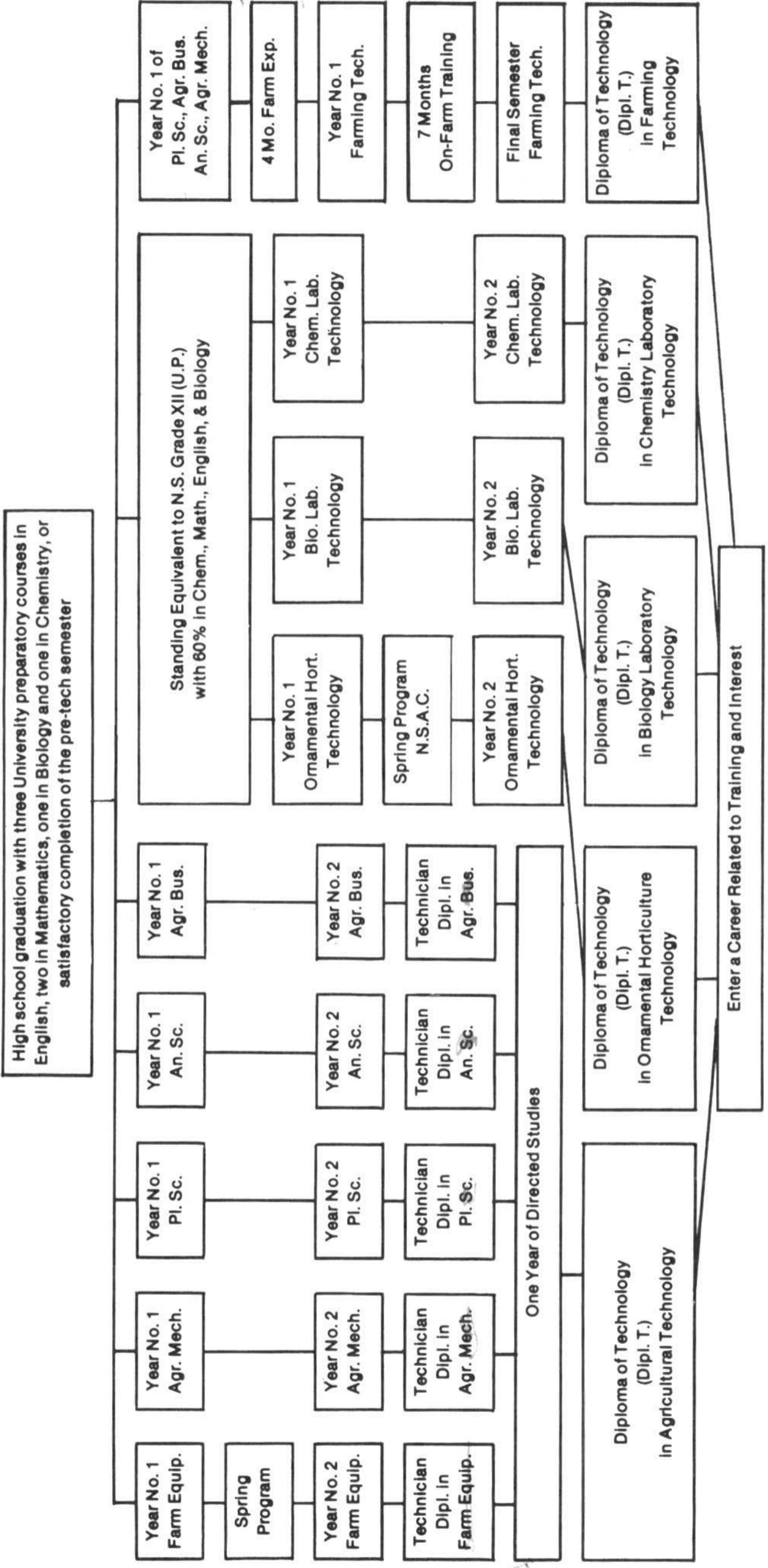
Students selected at NSAC to continue in the program leading to a D.V.M. are admitted to another Pre-Veterinary year of subjects at the University of Guelph before admission to the four-year course in Veterinary Medicine.

Those students who successfully complete the Pre-Veterinary course at NSAC but are not selected to continue in the program of study leading to a D.V.M. are admitted to the second year of the Agricultural Science Degree course at NSAC. These students may choose Animal Science or any one of a wide selection of options offered in the last two years of the B.Sc. (Agr.) program at the University of Guelph, Macdonald College of McGill University, or the University of Maine.

Most options in the B.Sc. (Agr.) programs lead to opportunities for graduate studies at the M.Sc. and Ph.D. levels.



TECHNICAL STUDIES AT THE NOVA SCOTIA AGRICULTURAL COLLEGE



TECHNICIAN COURSES

To satisfy the needs of the farm and farm-related businesses and services, the Nova Scotia Agricultural College offers a broad program of studies leading to Technician Diplomas.

Entrance Requirements

All candidates for admission

(a) should be eighteen years of age, on or before the opening day of the College year (mature younger candidates will be considered);

(b) must present a satisfactory medical certificate dated no more than thirty days previous to registration;

(c) must produce evidence of senior high school graduation with three University preparatory courses in English, two in Mathematics, one in Chemistry, and one in Biology, or satisfactory completion of the pre-tech semester;

(d) must present themselves for a selection interview when required.

Candidates of mature age and from a different academic background may apply and have their study records evaluated for admission.

Candidates with at least 60% in a senior high school course in Physics will be exempt from Physics MP15.

Applicants should understand that possession of the minimum entrance requirements will not guarantee admission.

Pre-Tech Semester

The Nova Scotia Agricultural College offers a program of studies designed to prepare High School graduates for entrance into our Technician courses. The period of studies will be from early January until late April (see Sessional Dates).

Candidates who are short of entrance requirements in up to three of the following subjects may be considered:

MP01	Mathematical Concepts
C01	Chemistry
H01	Language
EB01	The Agricultural Industry
B01	Biology

All students accepted for this pre-tech semester must take at least four of the above subjects.

Upon satisfactory completion of the semester, a student may be granted acceptance into one of the courses leading to a Technician Diploma.

Academic Standing

All students are assessed at the end of each semester. Those with failing averages (less than 50%) or failures in half or more of the subjects in which they are registered may be required to terminate their studies.

Students who complete all the course requirements with no mark below 50% of the maximum mark obtainable and are in good standing will be awarded a Technician Diploma and thus become "Associates of the Nova Scotia Agricultural College with all the rights and privileges pertaining thereto."

A high honours diploma will be awarded to a student who has attained an average of at least 80% and an honours diploma to one who has attained an average of at least 75%.

Supplemental Examinations

A student in a Technical course may write a supplementary examination in a maximum of half of the subjects for which the student is enrolled, if the combined average for all subjects is above 50% and the mark in the failed subject(s) is at least 35%.

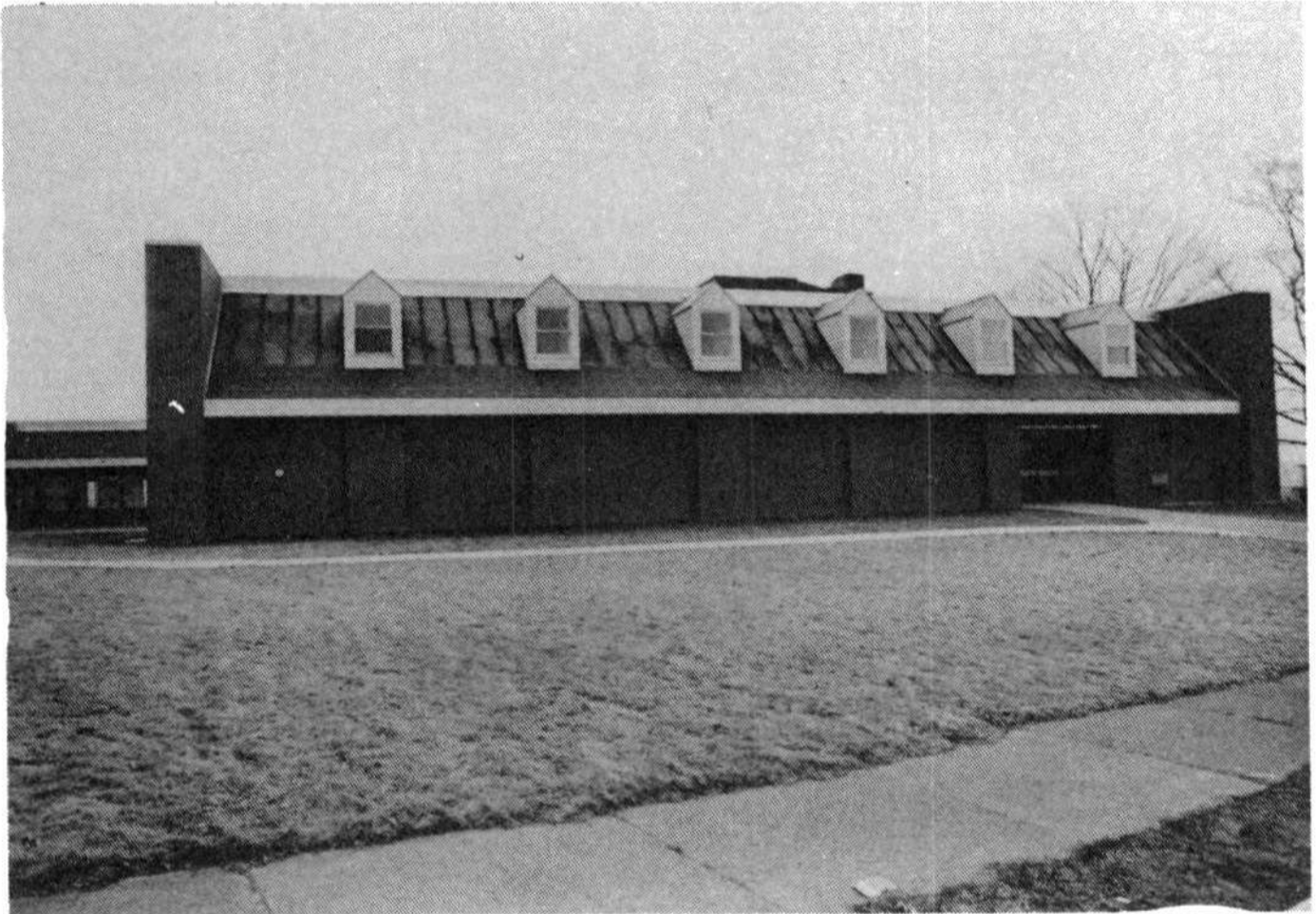
Provided that the disqualifying conditions stated above do not apply, a student may write one supplemental examination in a subject, either in June or September immediately following the failure. A student who fails to pass more than two subjects after writing supplemental examinations may not register for the regular second academic year.

A student in final year may write one supplemental examination in January if the passing of that examination, and

success with all final semester examinations can make the student eligible for graduation.

Application for permission to write a supplemental examination in June must be submitted before June 5 and for permission to write in September, before August 18.

The fee for a supplemental examination in any subject will be \$10. Should a candidate for a supplemental examination not give notice and pay the required fee on time, but present himself for an examination, he may, at the discretion of the Registrar and the instructor, be permitted to write upon payment of a fee of \$20 per examination. If a student does not show for a supplemental examination the fee is forfeited.



✓ AGRICULTURAL BUSINESS TECHNICIAN

The Nova Scotia Agricultural College offers a two-year course in Agricultural Business to help students prepare themselves for careers on the farm as business managers or as managers and supervisors in farm-related business firms.

Academic Entrance Requirements:

High School graduation with three University preparatory courses in English, two in Mathematics, one in Biology and one in Chemistry, or satisfactory completion of the pre-tech semester.

Syllabus for Agricultural Business with minor in:

Animal Science	Plant Science	Agricultural Mechanization
YEAR I		
Semester A		
C12 Soil Physics	C12 Soil Physics	C12 Soil Physics
C14 Agr. Chemistry	C14 Agr. Chemistry	C14 Agr. Chemistry
EB10 Accounting	EB10 Accounting	EB10 Accounting
EB12 Macro Economics	EB12 Macro Economics	EB12 Macro Economics
EB40 Marketing Practices	EB40 Marketing Practices	EB40 Marketing Practices
PS40 Field Crops I	PS40 Field Crops I	MP15 Physics ⁶
An additional subject, AS29 Farm Practices, is optional for all students		
Semester B		
C13 Soil Chemistry	AS30 Animal Science	AE15 Oil Hydraulics ⁶
EB11 App. Acct. & Taxation	C13 Soil Chemistry	AS30 Animal Science
EB13 Micro Economics	EB11 App. Acct. & Taxation	C13 Soil Chemistry
H10 Technical Writing	EB13 Micro Economics	EB11 App. Acct. & Taxation
MP14 Computational Methods	MP14 Computational Methods	EB13 Micro Economics
PS40 Field Crops II	PS40 Field Crops II	MP14 Computational Methods
YEAR II		
Semester C		
AS34 Animal Nutrition	B43 Entomology	AE30 Farm Machinery ^{4,6}
AS46 Animal Physiology	EB43 Business Project	EB43 Business Project
B18 Genetics	EB240 Farm Management	EB240 Farm Management
EB43 Business Project	H10 Technical Writing	H10 Technical Writing
EB240 Farm Management	PS53 Vegetable Production ²	PS40 Field Crops I
Humanities Subject	Humanities Subject	Humanities Subject

Semester D

AS35	Feeds & Feeding	EB41	Business Law	AE34	Farm Tractors ⁶
AS50	Dairy Production ¹	EB42	App. Farm	AE38	Hort. Engineering ⁵
AS51	Beef & Sheep Prod. ¹		Management	EB41	Business Law
EB41	Business Law	EB220	Production	EB42	App. Farm
EB42	App. Farm		Economics		Management
	Management	PS49	Potato Production ³	EB220	Production
EB220	Production	PS60	Plant Pathology		Economics
	Economics	PS210	Plant Prod.	PS41	Field Crops II
			Physiology		

1. May substitute AS52 Swine Production if timetable permits.
2. May substitute PS43 Berry Crops if timetable permits.
3. May substitute PS44 Tree Fruits if timetable permits.
4. May substitute AE14 Surveying if timetable permits.
5. May substitute AE45 Soil & Water Management if timetable permits.
6. May substitute AE12 Drafting, MP15 Physics, AE32 Farm Buildings and AE 36 Controls & Processing if timetable permits.

A student who has successfully completed the first year with a good study record, may apply for consideration to follow a two-year study program in Farming Technology.

A student who has successfully completed the two years of Agricultural Business with a good study record, may apply for consideration to follow a one-year study program in Agricultural Technology.



AGRICULTURAL MECHANIZATION

The Nova Scotia Agricultural College offers a two-year course to help students prepare themselves for careers as Agricultural Mechanization Technicians on farms or in farm-related firms and services.

Academic Entrance Requirements:

High School graduation with three University preparatory courses in English, two in Mathematics, one in Biology and one in Chemistry, or satisfactory completion of the pre-tech semester.

Syllabus for Agricultural Mechanization with minor in:

Animal Science		Plant Science		Agricultural Business	
YEAR I					
Semester A					
AE12	Drafting	AE12	Drafting	AE12	Drafting
AE13	Shopwork	AE13	Shopwork	AE13	Shopwork
C12	Soil Physics	C12	Soil Physics	C12	Soil Physics
C14	Agric. Chemistry	C14	Agric. Chemistry	C14	Agric. Chemistry
EB10	Accounting	EB10	Accounting	EB10	Accounting
MP15	Physics	MP15	Physics	MP15	Physics

An additional subject, AS29 Farm Practices, is optional for all students

Semester B					
AE15	Oil Hydraulics	AE15	Oil Hydraulics	AE15	Oil Hydraulics
AE19	Tech. Drawing	AE19	Tech. Drawing	AE19	Tech. Drawing
AE20	Shopwork Practices	AE20	Shopwork Practices	AE20	Shopwork Practices
EB11	App. Acct. & Taxation	EB11	App. Acct. & Taxation	EB11	Ap. Acct. & Taxation
H10	Tech. Writing	H10	Tech. Writing	H10	Tech. Writing
MP14	Computational Methods	MP14	Computational Methods	MP14	Computational Methods

YEAR II

Semester C					
AE14	Surveying	AE14	Surveying	AE14	Surveying
AE30	Farm Machinery	AE30	Farm Machinery	AE30	Farm Machinery
AE32	Farm Buildings	AE32	Farm Buildings	AE32	Farm Buildings
AS34	Animal Nutrition	PS40	Field Crops I	EB12	Macro Economics
AS46	An. Physiology	PS53	Vegetable Crops	EB40	Marketing Practices
B18	Genetics		Humanities Subject	EB240	Farm Management
Semester D					
AE34	Farm Tractors	AE34	Farm Tractors ¹	AE34	Farm Tractors
AE36	Controls & Processing ¹	AE36	Controls & Processing ¹	AE36	Controls & Processing ¹
AE45	Soil & Water Mgt. ^{1, 2}	AE45	Soil & Water Mgt. ^{1, 2}	AE45	Soil & Water Mgt. ^{1, 2}
AE47	Project/Seminar	AE47	Project/Seminar	AE47	Project/Seminar
AS50	Dairy production ¹	PS41	Field Crops II	EB13	Micro Economics ¹
	Humanities Subject	PS49	Potato Production		Humanities Subject

1. AE38 Horticultural Engineering may be substituted for one of these if timetable permits.

2. Another Livestock Production course may be substituted if timetable permits.

A student who has successfully completed the first year with a good study record, may apply for consideration to follow a two-year study program in Farming Technology or Agricultural Engineering Technology.

A student who has successfully completed the two years of Agricultural Mechanization with a good study record, may apply for consideration to follow a one-year study program in Agricultural Technology.

ANIMAL SCIENCE TECHNICIAN

The Nova Scotia Agricultural College offers a two-year course in Animal Science to help students prepare themselves for careers on farms as animal specialists or as animal science technicians in farm-related services and industries.

Academic Entrance Requirements:

High School graduation with three University preparatory courses in English, two in Mathematics, one in Biology and one in Chemistry, or satisfactory completion of the pre-tech semester.

Syllabus for Animal Science with minor in:

Agricultural Business		Agricultural Mechanization	
YEAR I			
Semester A			
B20 AS32 AS34 B18 C12 C14 EB10	Animal Physiology Animal Nutrition Genetics Soil Physics Agr. Chemistry Accounting	B20 AS32 AS34 B18 C12 C14	Drafting ³ Animal Physiology Animal Nutrition Genetics Soil Physics Agr. Chemistry
An additional subject, AS29 Farm Practices, is required of all students			
Semester B			
AS33 AS35 AS44 C13 EB11 MP14	Applied Animal Physiology Feeds & Feeding Animal Breeding Soil Chemistry App. Acct. & Taxation Computational Methods	AS33 AS35 AS44 C13 MP14 MP15	Applied Animal Physiology Feeds & Feeding Animal Breeding Soil Chemistry Computational Methods Physics
YEAR II			
Semester C			
AS47 AS53 EB240 H10 PS40	Animal Health Poultry Production ¹ Farm Management Technical Writing Field Crops I Humanities Subject	AE32 AS47 AS53 H10 PS40	Farm Buildings ^{3,4} Animal Health Poultry Production ¹ Technical Writing Field Crops I Humanities Subject
Semester D			
AS45 AS50 AS51 AS52 EB41 PS41	Project/Seminar Dairy Production ² Beef & Sheep Production ² Swine Production ² Business Law Field Crops II	AE36 AS45 AS50 AS51 AS52 PS41	Controls & Processing ^{3,4} Project/Seminar Dairy Production ² Beef & Sheep Production ² Swine Production ² Field Crops II

1. May substitute AS55 Fur Production or AS54 Horse Production if timetable permits.
2. May substitute B48 Lab Animal Care for one of these if timetable permits.
3. May substitute AE15 Oil Hydraulics, AE34 Farm Tractors and AE30 Farm Machinery for these three subjects if timetable permits.
4. May substitute AE14 Surveying and AE45 Soil & Water Management if timetable permits.

A student who has successfully completed the first year with a good study record, may apply for consideration to follow a two-year study program in Farming Technology.

A student who has successfully completed the two years of Animal Science with a good study record, may apply for consideration to follow a one-year study program in Agricultural Technology.



FARM EQUIPMENT TECHNICIAN

The Nova Scotia Agricultural College offers a two-year course to help students prepare themselves in farm equipment dealerships involving the adjustment, maintenance and repair of farm equipment.

Academic Entrance Requirements:

High School graduation with three University preparatory courses in English, two in Mathematics, one in Biology and one in Chemistry, or a satisfactory completion of the pre-tech semester.

Syllabus for Farm Equipment:

YEAR I

Semester A

AE12	Drafting
AE13	Shopwork
C12	Soil Physics
C14	Agricultural Chemistry
EB10	Accounting
MP15	Physics

Semester B

AE15	Oil Hydraulics
AE20	Shopwork Practice
AE27	Welding
EB11	Applied Accounting & Taxation
H10	Technical Writing
MP14	Computational Methods

YEAR II

Semester C

AE48	Shop Management
AE49	Electrical Systems
AE63	Tractor Power
AE64	Tractor Overhaul I
AE66	Field Equipment Overhaul I
PS30	Plant Science

Semester D

AE47	Project/Seminar
AE68	Farmstead Equipment Overhaul
AE65	Tractor Overhaul II
AE67	Field Equipment Overhaul II
AS30	Animal Science
	Humanities Subject

Spring Program - AE23 Farm Equipment Dealership - 6 weeks

PLANT SCIENCE TECHNICIAN

The Nova Scotia Agricultural College offers a two-year course in Plant Science to help students prepare themselves for careers on farms as plant specialists or as plant science technicians in farm-related services and industries.

Academic Entrance Requirements:

High School graduation with three University preparatory courses in English, two in Mathematics, one in Biology and one in Chemistry, or satisfactory completion of the pre-tech semester.

Syllabus for Plant Science with minor in:

Business		Horticulture		Animal Science	
YEAR I					
Semester A					
C12	Soil Physics	B13	Plant Identification	B13	Plant Identification
C14	Agr. Chemistry	C12	Soil Physics	C12	Soil Physics
EB10	Accounting	C14	Agr. Chemistry	C14	Agr. Chemistry
H10	Technical Writing	H10	Technical Writing	H10	Technical Writing
MP15	Physics	MP15	Physics	MP15	Physics
PS40	Field Crops I	PS43	Berry Crops	PS40	Field Crops I

An additional subject, AS29 Farm Practices, is optional for all students

Semester B

B40	Plant Pathology	B40	Plant Pathology	AE15	Oil Hydraulics
B41	Plant Physiology	B41	Plant Physiology	B40	Plant Pathology
C13	Soil Chemistry	C13	Soil Chemistry	B41	Plant Physiology
MP14	Computational Methods	MP14	Computational Methods	C13	Soil Chemistry
PS10	Plant Science Skills	PS10	Plant Science Skills	PS10	Plant Science Skills
PS41	Field Crops II	PS44	Tree Fruit Crops	PS41	Field Crops II

YEAR II

Semester C

B13	Plant Identification	AE14	Surveying	AE30	Farm Machinery
B43	Entomology	B43	Entomology	B20 AS32	Animal Physiology
EB12	Macro Economics	PS39	Greenhouse Management ³	AS34	Animal Nutrition
EB240	Farm Management Project	PS45	Turf I ³	B18	Genetics
PS52	Vegetable Crops ¹	PS50	Orn. Horticulture ³	B43	Entomology
PS53		PS52	Project	PS52	Project

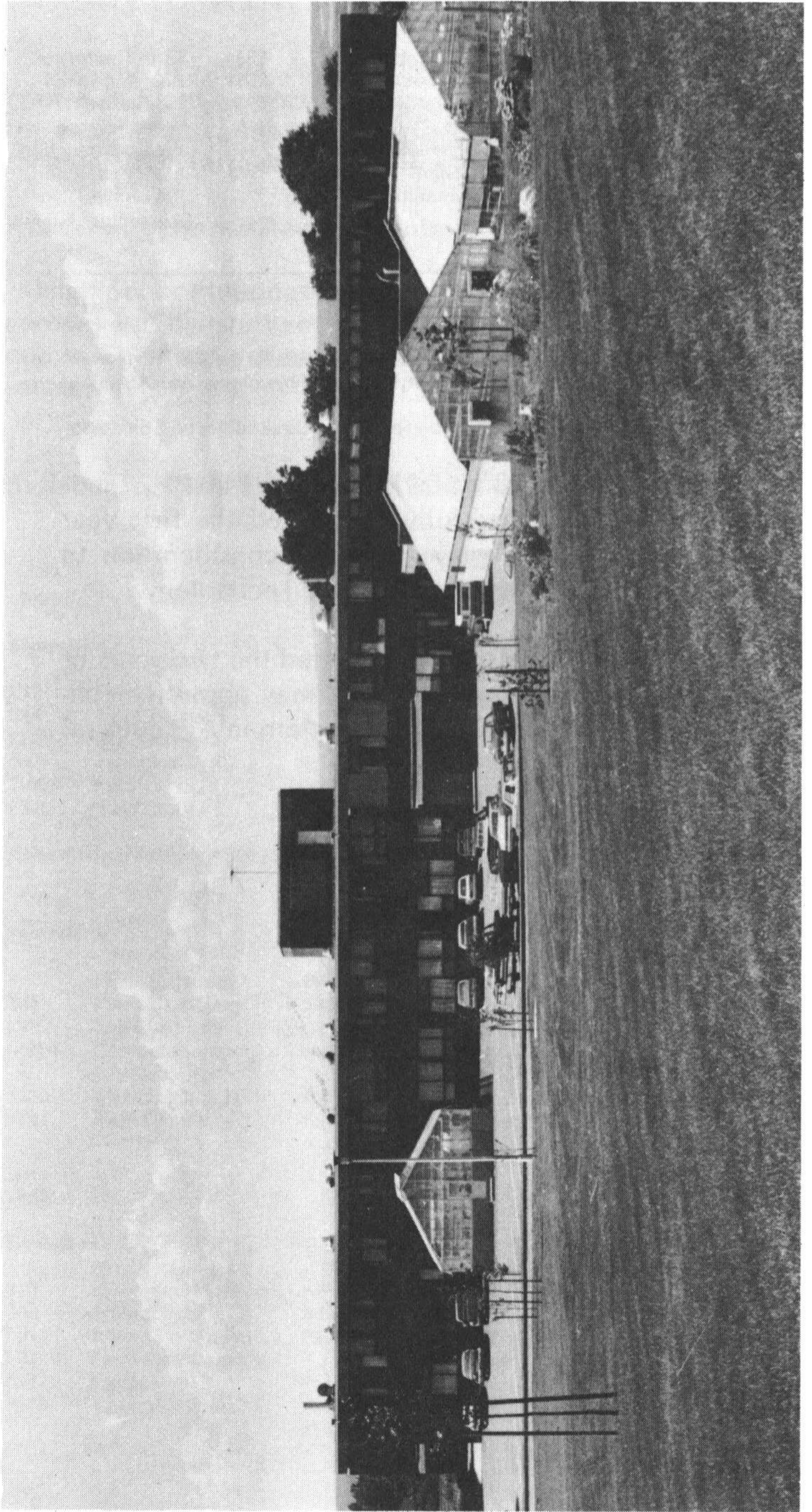
Semester D

B46	Weed Science	AE38	Hort. Engineering	AE34	Farm Tractors
EB11	App. Acct. & Taxation	B46	Weed Science	AS51	Beef and Sheep Production ⁶
EB13	Micro Economics	EB41	Business Law ⁴	B46	Weed Science
EB41	Business Law	PS46	Turf II ⁴	PS49	Potato Production ⁵
PS49	Potato Production ² Humanities Subject	PS51	Residential Land Design ⁴ Humanities Subject	PS76	Plant Production Physiology ⁵ Humanities Subject

-
1. May substitute PS43 Berry Crops if timetable permits.
 2. May substitute PS44 Tree Fruit Crops if timetable permits.
 3. May substitute other Plant Science production subject if timetable permits.
 4. May substitute PS49 Potato Prod., PS76 Plant Products Physiology, and AS30 An. Science if timetable permits.
 5. May substitute Cash Crops & Seed Production for one of these subjects if timetable permits.
 6. May substitute other Animal Science production subject if timetable permits.

A student who has successfully completed the first year with a good study record, may apply for consideration to follow a two-year study program in Farming Technology.

A student who has successfully completed the two years of Plant Science with a good study record, may apply for consideration to follow a one-year study program in Agricultural Technology.



TECHNOLOGY COURSES

Technology Courses for High School Graduates

The Nova Scotia Agricultural College offers specialized courses to help persons prepare themselves for careers associated with laboratory techniques in Biology and Chemistry, and with the practice of Ornamental Horticulture. These studies lead to a Diploma of Technology (Dipl. T.) in Chemistry, a Diploma of Technology (Dipl. T.) in Biology, and a Diploma of Technology (Dipl. T.) in Ornamental Horticulture.

Studies in Biology and Chemistry Laboratory Technology and in Ornamental Horticulture Technology

A candidate for a Diploma of Technology may qualify for admission to the two-year courses in one of two ways:

(1) completion of Grade XII (N.S. 012; N.B. 122; P.E.I. Academic XII) or its equivalent with marks of not less than 60% in English, Mathematics, Chemistry and Biology;

or (2) completion of degree or technical subjects in other post High School courses.

In addition each candidate must present a satisfactory medical certificate and be available for interviews when requested.

Accepted candidates will follow the syllabus for the course in which they have registered. The descriptions of each individual subject are found in the section of the Calendar beginning on page 60.

BIOLOGY LABORATORY TECHNOLOGY

The Nova Scotia Agricultural College offers a course to help students prepare for work as biology laboratory technologists with Agricultural and Biological Research Agencies, University Biology Departments, Food Processing and Distribution Companies, Environmental Control Services, Quality Control and Testing Services, or with Product Development Programs.

Academic Entrance Requirements:

High School graduation with completed Grade XII (N.S. 012; N.B. 122; P.E.I. Academic XII) or its equivalent with marks not less than 60% in English, Mathematics, Chemistry and Biology.

Syllabus of Subjects:

YEAR I

Semester A

B44	Microbiology I
B70	Microtechniques I
C12	Soil Physics
C40	Chemistry Laboratory Techniques
C42	Organic Chemistry
PS100	Plant Science

Semester B

AS100	Animal Science
B42	Botanical Laboratory Techniques
B45	Microbiology II
B71	Microtechniques II
C13	Soil Chemistry
C43	Bio-Organic Chemistry

YEAR II

Semester C

AS32 B20	Animal Physiology
AS34	Animal Nutrition
AS47	Animal Health
B13	Plant Identification
B270	Ecology
C45	Qualitative Analysis

Semester D

B41	Plant Physiology
B48	Laboratory Animal Care
B255	Plant Protection
C44	Instrumentation I
C46	Quantitative Analysis
MP70	Statistics

CHEMISTRY LABORATORY TECHNOLOGY

The Nova Scotia Agricultural College offers a course to help students prepare for work as a Chemistry Laboratory Technologist with Agricultural and Chemical Research Agencies, University Chemistry Departments, Food Processing and Distribution Companies, Environmental Control Services, Quality Control and Analysis Services, or with Product Development Programs.

Academic Entrance Requirements:

High School graduate with completed Grade XII (N.S. 012; N.B. 122; P.E.I. Academic XII) or its equivalent with marks not less than 60% in English, Mathematics, Chemistry and Biology.

Syllabus of Subjects:

YEAR I

Semester A

C40	Chemistry Lab. Techniques I
C42	Organic Chemistry
C45	Qualitative Analysis
C100	Chemistry (Lecs only)
MP40	Electrical Measurements
MP100	Calculus

Semester B

C41	Chemistry Laboratory Techniques II
C43	Bio-Organic Chemistry
C44	Instrumentation I
C46	Quantitative Analysis
MP70	Statistics
One approved elective from outside the Chemistry Department	

YEAR II

Semester C

C70	Instrumentation II
C74	Glass Blowing
C75	Food Chemistry I
MP41	Light & Optics
One approved elective from outside the Chemistry Department	

Semester D

C71	Instrumentation III
C73	Laboratory Organization and Management
C76	Food Chemistry II
MP71	Computer Programming
A Chemistry project and seminar program will be an integral part of both Semester C and D	

ORNAMENTAL HORTICULTURE TECHNOLOGY

The Nova Scotia Agricultural College offers a two-year course to help students prepare themselves for careers with landscaping firms, planning agencies, recreational parks, institutions or self-employed roles as ornamental horticultural technologists.

Academic Entrance Requirements:

High School graduation with a completed Grade XII (N.S. 012; N.B. 122; P.E.I. Academic XII) or its equivalent with marks not less than 60% in English, Mathematics, Chemistry and Biology.

Syllabus of Subjects:

YEAR I

Semester A

AE12	Drafting
B13	Plant Identification
C12	Soil Physics
PS45	Turf Production I
PS50	Ornamental Horticulture I
PS54	Plant Propagation

Semester B

AE38	Horticultural Engineering
B40	Plant Pathology
B41	Plant Physiology
C12	Soil Chemistry
PS46	Turf Production II
PS51	Residential Landscape Design
Spring Program — PS70 Landscaping Techniques — 6 weeks	

YEAR II

Semester C

AE14	Surveying
B43	Entomology
EB10	Accounting
H140	Personnel Management
PS71	Arboriculture
PS73	Ornamental Horticulture II
PS75	Ornamental Horticulture Project

Semester D

AE45	Soil & Water Management
EB11	App. Acct. & Taxation
EB41	Business Law
H210	Communications & Extension Methods
PS72	Landscape Maintenance
PS74	Landscape Design & Construction
PS77	Greenhouse & Landscape Crops

FARMING TECHNOLOGY

The Nova Scotia Agricultural College offers a course to help students prepare for a career as a farmer on a self-employed basis, or as a manager on a commercial farm.

Academic Entrance Requirements:

Satisfactory completion of year one in the Agricultural Business, Agricultural Mechanization, Animal Science or Plant Science Technician course and a satisfactory selection interview.

Syllabus of Subjects:

Four months of approved farm experience must be completed prior to Semester A.

YEAR I

Semester A

Required Subjects		Approved Electives Semester A	
AS29	Farm Practices	AE12	Drafting
C12	Soil Physics	AE13	Shopwork
C14	Agr. Chemistry	AE14	Surveying
EB10	Accounting	AE30	Farm Machinery
EB40	Marketing Practices	AE32	Farm Buildings
EB240	Farm Management	AS32	Animal Physiology
PS40	Field Crops I	AS34	Animal Nutrition
		AS47	Animal Health
		AS53	Poultry Production
		AS54	Horse Production
		AS55	Fur Production
		B13	Plant Identification
		B18	Genetics
		B43	Entomology
		B47	Farm Woodlot Management
		EB12	Macro Economics
		PS39	Greenhouse Management
		PS43	Berry Crops
		PS53	Vegetable Crops
			Humanities Subject

Semester B

AE15	Oil Hydraulics
AE34	Farm Tractors
C13	Soil Chemistry
EB11	App. Acct. & Taxation
EB220	Production Economics
H10	Technical Writing
MP14	Computational Methods
MP15	Physics
PS40	Field Crops II

On-Farm Training—a seven-month contract will be developed among the College, the student and a training farmer, following the second academic year of on-campus studies

YEAR II

Semester D

EB42 Applied Farm Management
EB72 Farm Project

It is expected that all students accepted into the course will have 12 credits based on the work of the previous year.

In order to satisfactorily complete the requirements for a Diploma of Technology in Farming, a student must complete all required subjects, the experience requirement, the On-Farm Training and thirteen of the approved electives.

Approved Electives Semester B or D

AE20	Shopwork Practices
AE36	Controls & Processing
AE38	Horticultural Engineering
AE45	Soil and Water Management
AS33	Applied Animal Physiology
AS35	Feeds & Feeding
AS44	Animal Breeding
AS50	Dairy Production
AS51	Beef & Sheep Production
AS52	Swine Production
B40	Plant Pathology
B41	Plant Physiology
B46	Weed Science
EB13	Micro Economics
EB41	Business Law
PS10	Plant Science Skills
PS42	Cash Crops & Seed Production
PS44	Tree Fruit Crops
PS49	Potato Production
PS76	Plant Products Physiology

Technology Courses for Technician Students

The College also offers courses designed to help technicians become more proficient in their chosen fields of agricultural endeavour. These studies lead to a Diploma of Technology (Dipl. T.) in Agricultural Technology.

Agricultural Technology

A candidate who has received a Technician Diploma in Agricultural Business, Agricultural Mechanization, Animal Science, or Plant Science or who has equivalent standing may apply for a year of directed study leading to a Diploma of Technology. If the study record is good and there is evidence of being capable of doing independent study, the application will be favourably considered.

For admission such a candidate must;

- (a) present a satisfactory medical certificate;
- (b) submit a program of study to the Technician-Technology Syllabus Committee; and
- (c) be available for interviews when requested.

“Program of Study” forms are available from the office of the Dean of Vocational and Technical Education. Application forms accompanied by a completed “Program of Study” should be submitted to the Registrar before May 1 of the year in which study is to commence.

Each program of study must be equivalent to an academic year and may include a combination of subjects, projects and experience.

Candidates will, as a general rule, select subjects from existing College courses for which prerequisites are met.

A more structured program of studies containing courses, projects, and potato industry labs has been developed to help students from countries buying Canadian seed potatoes better understand the technology of potato production. This sequence, developed in consultation with Potatoes Canada, begins in January and concludes in September of each year. A Diploma of Technology in Agricultural Technology is awarded upon the successful completion of the program.

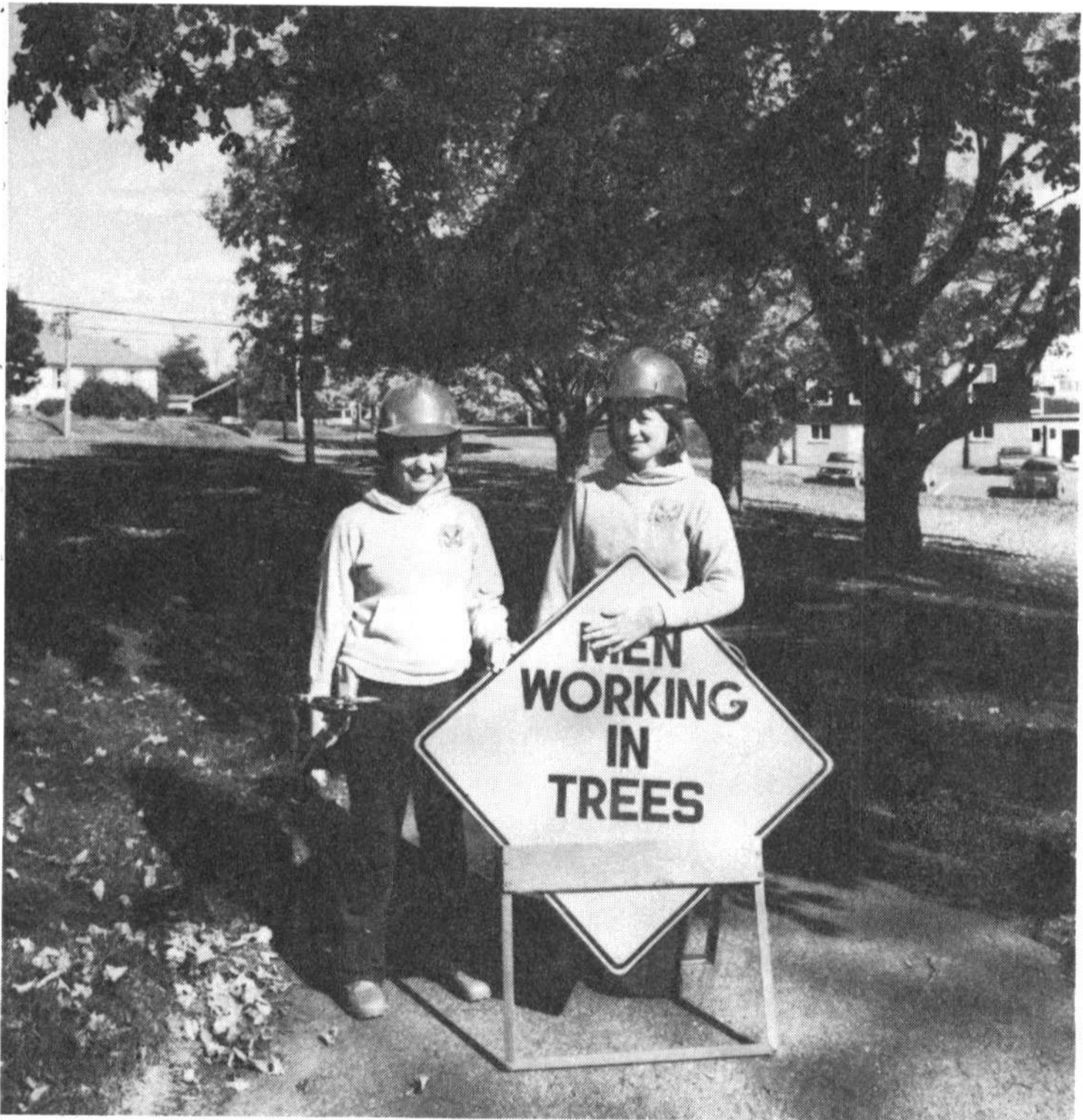
FARMING TECHNOLOGY

Students wishing to pursue studies leading to a Diploma of Technology in Farming register for the first year of the Agricultural Business, Animal Science, Plant Science or Agricultural Mechanization Technician course. After successfully completing the year, their applications are considered for the Farming Technology Course. Students with equivalent prerequisites from other college programs can also be considered. If accepted, the student’s program of study includes a minimum of three semesters of prescribed courses and eleven months of on-farm training. Seven months of the on-farm training is under the direction of a farming instructor.

QUALIFICATION FOR ALL DIPLOMAS OF TECHNOLOGY

Students who complete all the requirements with no mark below 50% of the maximum mark obtainable will be granted a Diploma of Technology (Dipl. T.).

A high honours diploma will be awarded to a student who has attained an average of at least 80% and an honours diploma to one who has attained an average of at least 75%.



DESCRIPTION OF SUBJECTS

The subject descriptions are grouped according to discipline and are in alphabetical and numerical order.

The Faculty reserves the right to make any revisions or additions which may be necessary.



AGRICULTURAL ENGINEERING

AE 12: **Drafting**

Instructors: **Prof. Townsend and Mr. Morash**

A course designed to help the student become proficient in this field. This is accomplished by practice printing, the use of instruments and freehand sketches, or orthographic, oblique and isometric drawings. Blueprint reading and tracing are also introduced.

Fall semester — 1 lec and 4 labs per week.

AE 13: **Shopwork**

Instructors: **Messrs. Burr, Morash, Hampton, and Bhola**

The selection, operation and maintenance of workshop tools including: the power grinder, drill press, fly press, metal- and wood-cutting bandsaws, iron worker, metal bender, squaring shears, box and pan and cornice brake, forming rolls; and also woodworking equipment such as: table saw, jointer, thicknesser, radial arm saw, wood lather, etc.; also use of portable wood- and metalworking tools. Students are introduced to the operation of a metal lathe and milling machine. Considerable welding is done using electric, acetylene, and spot welding machines. Some practice is given on the hard-to-weld metals such as aluminum and magnesium alloys. Identification and heat treatment of metals is also studied.

Fall semester — 2 lecs and 4 labs per week.

AE 14: **Surveying**

Instructor: **To be announced**

An introduction to surveying principles, methods and recording techniques. Students are given lectures and assignments to assist in understanding the principles employed in surveying and they practice these during the labs by conducting various surveying exercises. Practice is gained in proper use of surveying instruments—tape, level and transit—through exercises involving measurements of horizontal and vertical distances and angles. These include: chaining; stadia; benchmark; profile and contour leveling; triangulation and traverse exercises; and construction surveying, with emphasis being given to applying these to farm construction projects.

Fall semester — 2 lecs and 4 labs per week.

AGRICULTURAL ENGINEERING

AE 15: Oil Hydraulics

Instructors: **Messrs. Cunningham and Mitchell**

Introduction to pressure and flow concepts of oil as applied to hydraulic systems. Pressure and flow theory and principles of pump, actuator, and valve operations are discussed. Open centered, closed centered, and pilot-operated hydraulic systems, hydrostatic transmission, power steering, hydraulic motors and other accessories found on farm machinery are studied. Selection, maintenance, repair procedures and standards are introduced.

Winter semester — 3 lecs and 2 labs per week.

AE 19: Technical Drawing

Instructors: **Prof. Cunningham and Mr. Morash**

Prerequisite: **AE 12**

Includes pictorial drawings and sketches, both architectural and mechanical. Practice is obtained in drawing sections; developments of irregular shapes; preparation of farm buildings construction drawings; and area measurements using various methods, including planimeters. Throughout the course, students are encouraged to develop their own style, building on basics gained in drafting. They also make their own blueprints to determine the effect of varying line weights and drafting aids.

Winter semester — 1 lec and 4 labs.

AE 20: Shopwork Practices

Instructors: **Messrs. Burr, Morash, Hampton and Bhola**

Prerequisite: **AE 13**

Individual projects are undertaken by students, using the skills acquired in Shopwork. These projects are selected by the student from prescribed projects and may be of metal or wood or a composite, utilizing the shop equipment and machinery in the metalworking, welding, and woodworking shops. Projects will be agriculturally oriented.

Winter semester — 2 lecs and 4 labs per week.

AE 23: Farm Equipment Dealership

Instructor: **To be announced**

A spring course during which the student studies and works with a selected farm equipment dealer-instructor. Instruction

will cover all aspects of the farm equipment dealership operation. Students will be rated on a specific list of skills and procedures.

Spring term — 6 weeks.

AE 27: Welding

Instructors: **Messrs. Burr and Hampton**

Prerequisite: **AE 13**

Principles and practices of oxyacetylene and electric arc welding, cutting and brazing of cast iron and steel in flat, vertical and overhead positions are studied. Safety precautions, electrode selection, welding joint design, hard surfacing, and electric arc welding and spot welding machine design are investigated. Included in the demonstrations and practice is ferrous and nonferrous welding. Weld strength may be determined by the use of a modern tensile testing machine.

Winter semester — 2 lecs and 4 labs per week.

AE 30: Farm Machinery

Instructor: **To be announced**

Prerequisite: **AE 15**

Operating principles of the basic types of farm machinery. Tillage, planting, chemicals and fertilizer application, harvesting equipment and power transfer are studied. Functional requirements and economic analysis of machinery selection are covered. Laboratory periods emphasize adjustment, calibration and maintenance of the machinery.

Fall semester — 2 lecs and 4 labs per week.

AE32: Farm Buildings

Instructor: **To be announced**

Prerequisite: **AE 12**

This course deals with construction and layout of farm buildings and includes the study of construction techniques and design considerations. Included are such topics as: materials; space requirements and building layout; structural requirements; and insulation and ventilation. Students will be required to prepare drawings of building features and components, to prepare material lists from construction drawings and to become familiar with standards of all classes of farm buildings through use of codes of recommended building practice.

AGRICULTURAL ENGINEERING

Fall semester—2 lecs and 4 labs per week.

AE 34: Farm Tractors

Instructor: **To be announced**

Prerequisite: **AE 15**

Introduction to the principles of power generation and transmission as applied to farm tractors. Two and four stroke gasoline and diesel engines are studied and compared. Operation principles and components of transmissions are discussed, including gear types and ratios, lubrication, auxiliary transmissions, hydraulic drives and differentials. Basic concepts of performance testing, maintenance and operation are introduced.

Winter semester — 2 lecs and 4 labs per week.

AE 36: Controls & Processing

Instructor: **To be announced**

Prerequisite: **AE 12**

This is the study of AC and its application in the processing and handling of various farmstead materials. The students gain knowledge of basic wiring, special switches and controls. AC motor operation and electric heaters thus enabling them to identify troubles should they occur during critical situations and hopefully correct them. Also included is an understanding of the processing and handling methods and the related equipment. The area of materials handling is explored through various problems and assignments and field visits are arranged to view various related materials handling equipment.

Winter semester — 2 lecs and 4 labs per week.

AE 38: Horticultural Engineering

Instructor: **To be announced**

Small gasoline engine structure and operating theory with emphasis placed on maintenance of the engine wherever possible. This course includes basic hydraulic theory with emphasis on the operation of common systems in use today. Horticultural machinery section, operation and adjustments are discussed. The principles of mixing, placing and curing concrete, along with the use of iron and wood for fences, walls and furnishings are taught with regard to the importance of durability.

AGRICULTURAL ENGINEERING

Winter semester — 2 lecs and 4 labs per week.

AE 45: Soil and Water Management

Instructor: **To be announced**

Prerequisite: **AE 14**

The fundamentals of soil and water engineering with application to agricultural and recreational lands. The course deals with rudimentary hydrology, soil erosion, drainage systems, irrigation systems, marshland improvement and other associated topics. Laboratory periods cover design problems, project field labs and tours.

Winter semester — 2 lecs and 4 labs per week.

AE 47: Project/Seminar

Instructor: **To be announced**

Presentation of a seminar and written report on an approved agricultural mechanization or farm equipment topic. Lecture will review methods of presentation and preparation of selected topics. Projects under supervision of selected staff members.

Winter semester — 1 lec and labs to be arranged.

AE 48: Shop Management

Instructor: **To be announced**

Prerequisite: **AE 23**

A study of the management of a farm equipment dealership. Topics include: the organizational structure; responsibilities of each level of management and of each department within the dealership; communication within each department, with each other, and with the customer; controls involved, including work orders, time records, parts inventory control.

Fall semester — 3 lecs and 2 labs per week.

AE 49: Electrical Systems

Instructor: **To be announced**

Electric circuits and components on engines and tractors will be studied. Basic theory will be given and test equipment used for checking electrical systems.

AGRICULTURAL ENGINEERING

Fall semester — 2 lecs and 4 labs per week.

AE 63: Tractor Power

Instructor: **To be announced**

Prerequisite: **AE 15**

The theory and type of diesel and gasoline engines and the principles and theory of power development and transmission in farm tractors will be studied. Small engines will also be included. Test equipment will be used during the lab work.

Fall semester — 2 lecs and 4 labs per week.

AE 64: Tractor Overhaul I

Instructor: **To be announced**

Prerequisite: **AE 63**

Complete diagnosis, cost estimating and overhaul of tractor engines and transmissions will be carried out. The theory and knowledge gained in previous courses will be used along with overhaul techniques introduced in this course.

Fall semester — 1 lec and 6 labs per week.

AE 65: Tractor Overhaul II

Instructor: **To be announced**

Prerequisite: **AE 64**

A continuation of the analyzing, estimating and overhauling of different parts and types of tractors with appropriate record keeping as carried out in Tractor Overhaul I.

Winter semester — 1 lec and 6 labs per week.

AE 66: Field Equipment Overhaul I

Instructor: **To be announced**

Prerequisite: **AE 15**

Experience in overhauling of field equipment will be given by developing a system of inspection, estimating repairs and parts required and developing probable costs. The overhauling of equipment will be carried out and appropriate records and tests will be made.

AGRICULTURAL ENGINEERING

Fall semester — 1 lec and 6 labs per week.

AE 67: Field Equipment Overhaul II

Instructor: **To be announced**

Prerequisite: **AE 66**

The experience and methods developed in Field Equipment I along with the good work habits established will be continued.

Winter semester — 1 lec and 6 labs per week.

AE 68: Farmstead Equipment Overhaul

Instructor: **To be announced**

Prerequisite: **AE 15**

Equipment used within and around buildings will be overhauled after first analyzing the individual equipment and establishing the repairs and parts required with the probable costs.

Winter semester — 1 lec and 6 labs per week.

AE 100: Graphics and Projection

Instructor: **Prof. Adams**

Freehand sketching and instrument drawing are used to explore the fundamental principles of projection and to apply these to the solution of problems of orthographic projection in descriptive geometry as required by the design process. Emphasis is placed on the application of graphical techniques to the solution of engineering problems.

Fall semester — 2 lecs and 4 labs per week.

Text: A.S. Levens, *GRAPHICS-ANALYSIS AND CONCEPTUAL DESIGN*

AE 105: Graphics and Design

Instructor: **Prof. Adams**

Prerequisite: **AE 100**

Graphical techniques are applied to vector analysis of design problems and to the presentation of design data. Design practices are investigated and used in student projects aimed at developing creativity in the design process.

AGRICULTURAL ENGINEERING

Winter semester — 1 lec and 4 labs per week.

Text: A.S. Levens, *GRAPHICS-ANALYSIS AND CONCEPTUAL DESIGN*

AE 110: **Statics**

Instructor: **To be announced**

A course dealing with forces acting on bodies at rest in two and three dimensions. Concepts of equilibrium and equivalent force systems are used to analyze structures, frames and machines. Friction, centroids and moments of inertia are introduced to develop an ability to analyze and solve problems in a logical manner.

Fall semester — 3 lecs and 3 labs per week.

Text: Beer & Johnson, *VECTOR MECHANICS FOR ENGINEERS, McGraw-Hill*

AE 120: **Dynamics**

Instructor: **Prof. Havard**

Prerequisite: **AE 110**

A course dealing with rectilinear and curvilinear motion of particles, force, mass and acceleration, work and energy, impulse and momentum. To provide a sound background in the principles of particle and line motion.

Winter semester — 2 lecs and 2 labs per week.

Text: Beer & Johnson, *VECTOR MECHANICS FOR ENGINEERS, McGraw-Hill*

AE 220: **Agricultural Structures**

Instructor: **Prof. Adams**

An introduction to farmstead design, layouts and plans, environmental conditions and functional requirements of structures for product storage and livestock will be given. Construction methods and material standards will also be considered.

Winter semester — 2 lecs and 2 labs per week.

Texts: (1) *CANADIAN FARM BUILDING CODE*
(2) *MIDWEST PLAN SERVICE STRUCTURES AND ENVIRONMENT HANDBOOK*

AGRICULTURAL ENGINEERING

AE 225: **Thermodynamics**

Instructor: **Prof. Havard**

A study of the conservation of energy and mass in flow and non-flow systems and processes; application of the first and second laws in cycles using ideal gases and vapors, including: the properties of liquids and vapors, processes and cycles, and energy balances.

Fall semester — 3 lecs and 3 labs per week.

Text: Von Wylene and Sonntag, *FUNDAMENTALS OF CLASSICAL THERMODYNAMICS*, SI Version (2nd edition)

AE 230: **Agricultural Mechanization**

Instructor: **To be announced**

Modern crop production equipment is studied with a view to understanding the function of the machine as a unit and as part of the production system. The capacity as well as the costs associated with different machinery management systems will be investigated.

Winter semester — 2 lecs and 2 labs per week.

Text: Kepner, Bainer, and Barger, *PRINCIPLES OF FARM MACHINERY*

AE 240: **Material Science**

Instructor: **Prof. Havard**

The objective of this course is to give the student a basic understanding of the significance of structure in determining the useful properties of materials. Topics include: mechanical properties; property transformations; thermal properties; wear; corrosion.

Fall semester — 3 lecs and 2 labs.

Text: Brick, Pense, Gordon, *THE STRUCTURE AND PROPERTIES OF ENGINEERING MATERIALS* (4th edition)

AE 245: **Strength of Materials**

Instructor: **Prof. Saxon**

AGRICULTURAL ENGINEERING

The course consists of the analysis of mechanical structures with respect to the loads applied and the resulting deformations. This then permits the selection of materials with the required dimensions for the structures. Topics covered include: centric loading, principal stresses, flexural loading, deflection of beams and shafts, torsional loading, combined loadings.

Winter semester — 3 lecs and 2 labs per week.

Text: *Higdon, Ohlsen, Stiles, Weese, MECHANICS OF MATERIALS* (3rd edition)

AE 250: Fluid Mechanics

Instructor: **Prof. Havard**

A study of physical properties of liquids and gases, fluid statics, and fluid flow; including pressure, Manometry hydrostatic forces, stream lines and tubes, continuity, momentum, Bernoulli equation, flow measurement, viscous flow and dimensionless numbers.

Winter semester — 3 lecs and 2 labs per week.

Text: *Streeter, FLUID MECHANICS*, McGraw-Hill

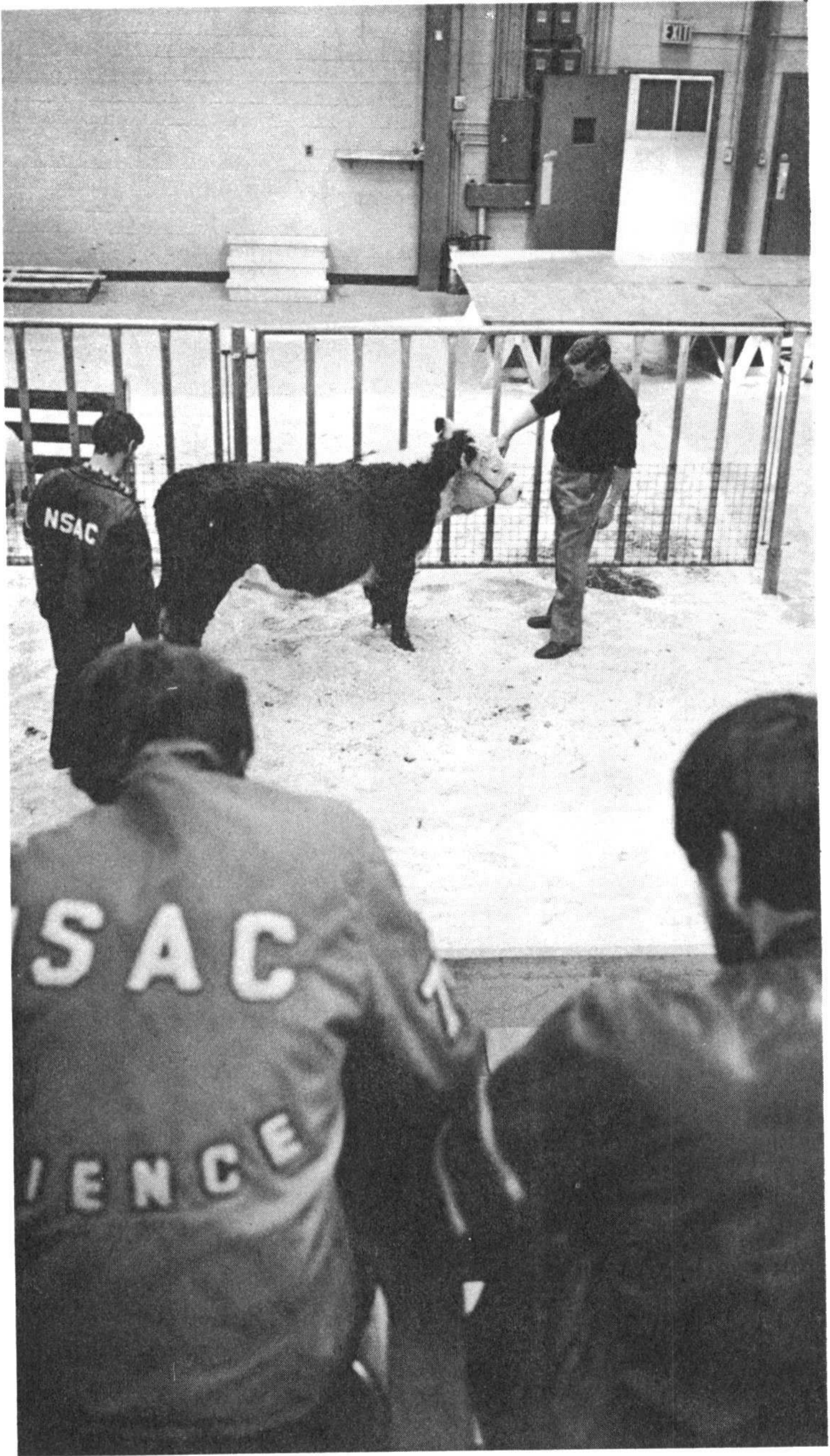
AE 260: Surveying

Instructor: **To be announced**

An introduction to the use of surveying instruments, including distance measurement, differential and profile leveling and transit traverse projects.

2 weeks following the winter semester.

Text: *Kissan, SURVEYING PRACTICE*, McGraw-Hill



ANIMAL SCIENCE

AS 29: **Farm Practices**

Instructors: **Interdisciplinary Staff**

Students will be expected to develop a basic understanding of farm practices so that they may perform with a minimum of supervision in work requiring the use of such practices as:

1. Tractor operation
2. Operation of Forage Harvesting Equipment
3. Operation of Tillage Equipment
4. Typing
5. Farm Production Records
6. Milking
7. Farm Animal Control & Handling
8. Birth & Management of Young Farm Animals
9. Welding
10. Operation and Use of Chain Saw
11. Calibration of Crop Application Equipment
12. Fencing
13. Field Measurement and Yield Calculation

These may be learned on-campus or on approved farms, and a final evaluation on each practice will be recorded. A student may be permitted to extend the time period for completing this course over more than one semester.

AS30: **Animal Science**

Instructor: **Prof. Forbes**

This course will examine the place of livestock on Atlantic Region farms with some emphasis on the integration of crops and livestock. A study of the needs of livestock for feeding, housing and the maintenance of health, and the examination of management are important subject areas.

Winter semester — 3 lecs and 2 labs per week.

AS 33: **Applied Animal Physiology**

Instructor: **Prof. Crober**

This course will deal with aspects of animal function which are of particular relevance to animal production. Subject areas include reproduction, growth and development, digestion and metabolism, and environmental physiology. Emphasis will be placed on details which are of a practical nature.

Winter semester — 2 lecs and 2 labs per week.

AS 34: Animal Nutrition

Instructor: **Prof. Forbes**

The objective of this course is to study the principles of the nutrition of animals. Emphasis is given to the needs and utilization of specific nutrients.

Fall semester — 3 lecs per week.

Text: Maynard and Loosli, *ANIMAL NUTRITION*

AS 35: Feeds and Feeding

Instructor: **Prof. Cock**

Prerequisite: **AS 34**

The course is designed to teach the basic composition of feeds, the methods of feed formulation and the use of nutrient requirements tables. Specialized feeding programs will be discussed in relation to domestic animals.

Winter semester — 2 lecs and 2 labs per week.

Text: Church, *LIVESTOCK FEEDS AND FEEDING*

AS 37: Laboratory Animal Care

Instructor: **Prof. Crober**

Prerequisites: **B 18, B 20 and AS 34**

This course is designed to instruct the student in the proper care and handling of the laboratory animal. The characteristics and requirements of relevant species will be reviewed. Additional techniques learned will be those regularly used in research and teaching.

Fall semester — 2 lecs and 2 labs per week.

AS 44: Animal Breeding

Instructor: **Prof. Mathewson**

Prerequisite: **B 18**

This course will deal with the principles and mechanisms of inheritance in farm animals, with the principles and methods of selection and breeding, and with the improvement programs currently employed in different farm species.

ANIMAL SCIENCE

Winter semester — 3 lecs per week.

Text: Dalton, *AN INTRODUCTION TO PRACTICAL BREEDING*

AS 45: Project/Seminar

Instructors: **Animal Science Staff**

This is an opportunity to examine, in detail, specific agricultural topics of interest to the students. Projects will be organized and carried out by the students under the supervision of various staff members. Students are required to start their project at the beginning of the 1st semester.

Winter semester — 2 labs (to be assigned) per week.

AS 47: Animal Health

Instructor: **Prof. Long**

The objectives of this course are to teach the student about the organismal and other causes of disease; to recognize health and ill health and to understand the principles of disease prevention and treatment.

Fall semester — 3 lecs and 2 labs per week.

AS 50: Dairy Production

Instructor: **Prof. Cock**

Prerequisites: **B 18, B 20 and AS 34**

This is a course in the management of dairy cattle and goats, and the production of dairy products. Lectures and laboratories will cover the topics of breeding, feeding, housing, marketing, processing and economics.

Winter semester — 3 lecs and 2 labs per week.

AS 51: Beef & Sheep Production

Instructor: **Prof. Mathewson**

Prerequisites: **B 18, B 20 and AS 34**

This course will deal with the objectives and methods of producing beef cattle, sheep and wool, both from an industry viewpoint and also, at greater length, from the standpoint of the individual producer. There will be a practical emphasis with visits to outside herds and flocks as well as use of the college animals.

Winter semester — 3 lecs and 2 labs per week.

AS 52: Swine Production

Instructor: **Prof. Hamilton**

Prerequisites: **B 18, B 20 and AS 34**

A study of swine production both as an industry and as a major farm enterprise. The economic swine production unit is the framework for the course with studies in the practical aspects of reproduction, feeding, breeding and management integrated to maximize the operation of the swine enterprise as a whole.

Winter semester — 2 lecs and 2 labs per week.

Text: Pond and Maner, *SWINE PRODUCTION IN TEMPERATE AND TROPICAL ENVIRONMENTS*

AS 53: Poultry Production

Instructor: **Prof. Crober**

Prerequisites: **B 18, B 20 and AS 34**

This course will cover the principles and procedures relating to the production and marketing of poultry meat and eggs, including operation and management. Emphasis will be placed on practical aspects.

Fall semester — 2 lecs and 2 labs per week.

AS 54: Horse Production

Instructor: **Prof. Forbes**

Prerequisites: **B 18, B 20 and AS 34**

This course includes both the theoretical and practical aspects of horse care. Lectures will cover the following subject areas: history, local industry, breeds and selection, nutrition, reproduction, health and management. Laboratory work will emphasize the practical aspects of the lecture material.

Fall semester — 2 lecs and 2 labs per week.

AS 55: Fur Production

Instructor: **To be announced**

Prerequisites: **B 18, B 20 and AS 34**

This course will cover the principles and procedures relating to the production and marketing of fur, including the operation and management of fur ranches in the Atlantic Region. Emphasis will be placed on practical aspects.

ANIMAL SCIENCE

Fall semester — 2 lecs and 2 labs per week.

AS 100: **Animal Science**

Instructors: **Profs. Mathewson, Crober and Cock**

An introduction to the principles of commercial animal agriculture. Topics covered include: breeding systems, physiology of reproduction and lactation, animal nutrition, a survey of animal agriculture and applied management skills.

Winter semester— 3 lecs and 2 labs per week.

Text: Hammond, *FARM ANIMALS*

AS 210: **Selected Studies in Animal Science**

Instructors: **Animal Science Staff**

Prerequisite: **AS 100**

A non-structured course offering students the opportunity to study, in depth, one aspect of Animal Science.

Instruction will be by selected texts, informal discussion and practical experience. Suggested areas of study are: dairy cattle production, beef cattle production, sheep production, swine production, and poultry production.

Fall semester— 3 lecs per week.

AS 310: **Ruminant Nutrition**

Instructors: **Guest Lecturers**

Prerequisite: **Graduation in Agriculture**

This course reviews the basic principles of nutrition followed by major sections on ruminant digestion and physiology, and ruminant animal feeding. It involves sixty hours of instruction plus a class project and is offered as a block course for Agricultural graduates.

Time: To be announced.

AS 320: **Animal Breeding Principles and Practices**

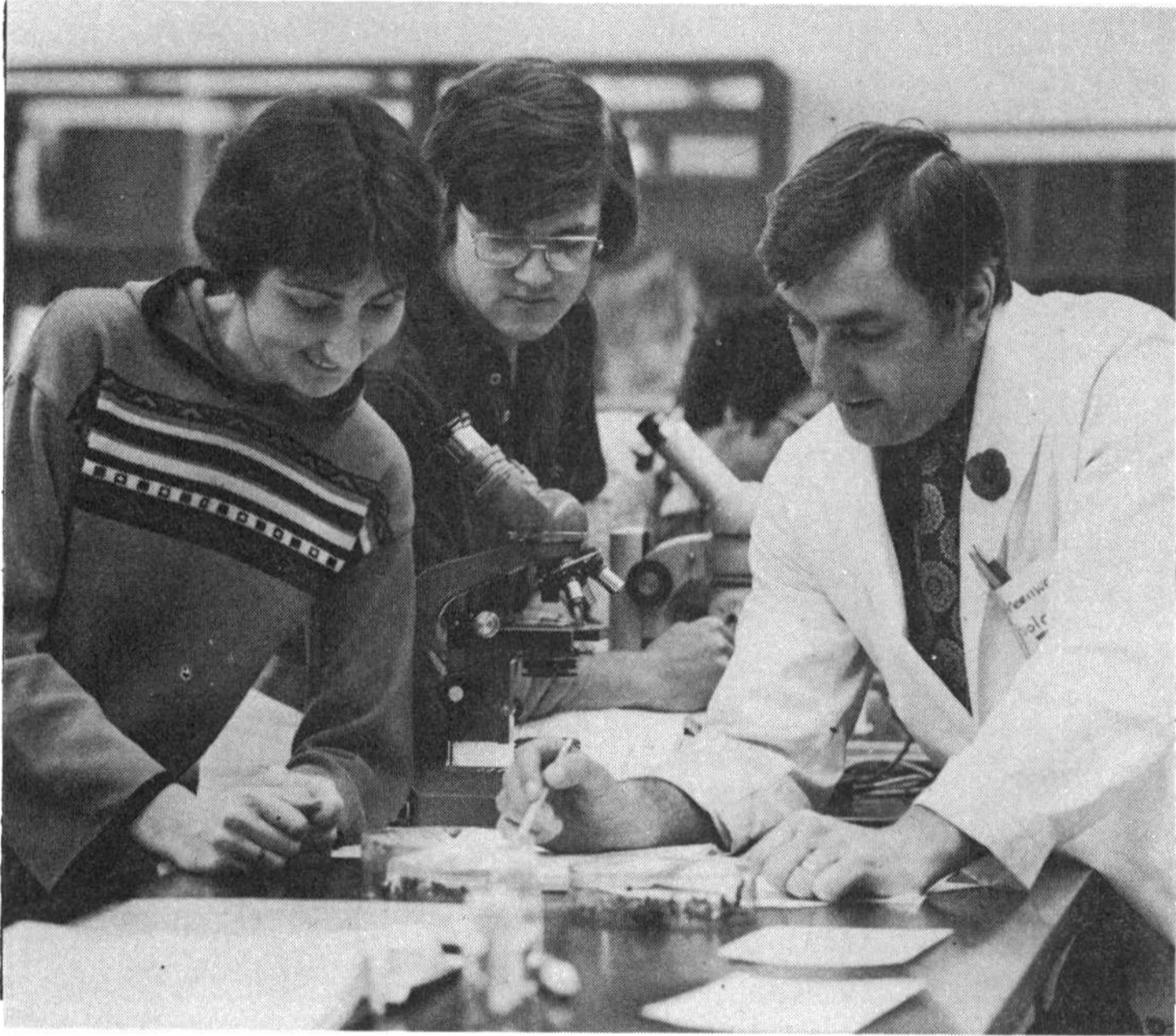
Instructors: **To be announced**

Prerequisite: **Graduation in Agriculture**

This course reviews and updates the principles of animal breeding and discusses animal genetic practices by species. Guest lecturers are used extensively and students are required to prepare and report on a selected topic. This is a Continuing Education course.

Time: To be announced

BIOLOGY



B 01: Biology

Instructor:

An introduction to the basic principles of plant and animal biology that are most important to agriculture. Topics will include plant structure and function, growth and reproduction, plant nutrition, animal anatomy and function, animal systems, animal nutrition, photobiology, introductory genetics, introductory ecology.

Winter semester — 3 lecs and 4 labs per week.

B 13: Plant Identification

Instructor: **Prof. Prange**

A course covering the classification and naming of plants, with special attention given to our common species of the Atlantic Provinces. The important plant families will be considered, along with laboratory work in identification. Students

BIOLOGY

are required to make a collection of pressed plants, properly identified and labelled.

Fall semester—2 lecs and 3 labs per week.

Texts: Roland, *THE FLORA OF NOVA SCOTIA*
Mulligan, *COMMON WEEDS OF CANADA*

B 18: Genetics

Instructor: **Prof. Padmanathan**

A study of the basic principles of inheritance and variation in animal populations and the application of those principles in animal breeding, particularly as it relates to farm animals.

Fall semester—3 lecs and 2 labs per week.

B 20: Animal Physiology

Instructor: **To be announced**

A course designed to provide a basis in the knowledge of animal physiology as it applies to farm animals. The course will include topics on blood and circulation, digestion and absorption, excretion, respiration and reproduction, as well as a brief consideration of the skeletal and muscular systems.

Fall semester—3 lecs and 2 labs per week.

B 40: Plant Pathology

Instructor: **Prof. McFadden**

An introductory course dealing with the nature, cause and control of plant diseases due to infectious and noninfectious agents. Included are discussions on the infection process, resistance mechanisms, the effects of environment on disease development, as well as the safe use and handling of fungicides to control important diseases in the region.

Winter semester — 2 lecs and 3 labs per week.

Text: Roberts and Boothroyd, *FUNDAMENTALS OF PLANT PATHOLOGY*

B 41: Plant Physiology

Instructor: **Prof. Prange**

A course dealing with plant structure and function, as well as plant growth, development, and reproduction. Various

plant processes, such as photosynthesis, respiration, absorption and nutrition, water movement, transpiration, and growth will be studied. Topics of importance to agriculture, such as growth regulators, photoperiodism and dormancy, will also be considered.

Winter semester — 3 lecs and 3 labs per week.

Text: Bleasdale, *PLANT PHYSIOLOGY IN RELATION TO HORTICULTURE*

B 42: Botanical Laboratory Techniques

Instructor: **Prof. McFadden**

A practical course stressing the essentials of plant propagation, transplanting and growing techniques used in the greenhouse. Emphasis is placed on the culture of algae, fungi, pteridophytes and bryophytes commonly used for teaching and laboratory experiments. Included will be an introduction to tissue culture techniques, and a major project.

Winter semester — 2 lecs and 3 labs per week.

B 43: Entomology

Instructor: **Prof. Eaton**

An introduction to the biology and control of insects and related organisms, with emphasis on those found in Atlantic Canada. Structure, growth, reproduction distribution, and methods of controlling insect pests are considered.

Fall semester — 3 lecs and 3 labs per week.

B 44: Microbiology I

Instructor: **Prof. Stratton**

An introduction to the science of microbiology. Lectures will be concerned with the concepts of microbial classification, structure, microscopic observation, isolation, cultivation, nutrition, growth, metabolism, and identification. Special attention will be given to the relationships of microorganisms of water and foods. Laboratory work will stress the principles and procedures of staining, preparation of microbial media, isolation techniques, culturing, biochemical tests and identification.

Fall semester — 2 lecs and 3 labs per week.

BIOLOGY

Text: Brock and Brock, *BASIC MICROBIOLOGY*

B 45: Microbiology II

Instructor: **Prof. Stratton**

This course is a continuation of Microbiology I. Lectures will be concerned with infection and immunity, mutation, soil microbiology, ruminant microbiology, mycotoxins in feeds, silage microbiology, production of industrial and medicinal compounds. Laboratory work will stress isolation and identification of unknowns, followed by detailed studies of certain agricultural topics including soil, milk, water, and foods.

Winter semester — 2 lecs and 3 labs per week.

Text: Brock and Brock, *BASIC MICROBIOLOGY*

B 46: Weed Science

Instructor: **To be announced**

A course dealing with the principles of weed science in relation to agricultural practices in the region. Included are discussions on weed recognition, chemical and non-chemical approaches to controlling weeds in vegetable, fruit and grain crops as well as lawns and non-crop areas. The selection, safe use, handling, and storage of herbicides is stressed along with the environmental impact of the different methods of weed control.

Winter semester — 3 lecs and 3 labs per week.

B 47: Farm Woodlot Management

Instructor: **To be announced**

The farm woodlot resource is described and management procedures described and illustrated.

Special attention is given to the production and harvesting of saw logs, pulpwood, Xmas trees, fuel wood and maple sap. Development programs administered by Provincial Government Departments are covered.

Fall semester — 2 lecs and 3 labs per week.

B 70: Microtechniques I

Instructor: **Prof. Crosby**

Preparation of temporary and permanent whole mounts for microscopical examinations; staining of prepared slides; cytological work.

Fall semester — 3 lecs and 4 labs per week.

Text: Gallagher and Kozloff, *ESSENTIALS OF PRACTICAL MICROTECHNIQUE*

B 71: Microtechniques II

Instructor: **Prof. Crosby**

Prerequisite: **Microtechniques I**

A continuation of Microtechniques I. Use of the microtome; staining and slide preparation; also histochemical techniques.

Winter semester—2 lecs and 4 labs per week.

Text: Gallagher and Kozloff, *ESSENTIALS OF PRACTICAL MICROTECHNIQUE*

B 100: The Plant Kingdom

Instructor: **Prof. McFadden**

An evolutionary review of the plant kingdom with the classification, morphology and life cycles of representatives of the algae, fungi, bryophytes and tracheophytes. Special attention will be given to the fungi with an introduction to plant pathology. The angiosperms will be briefly considered, with a review of the evolution and history of our flora.

Fall semester—3 lecs and 4 labs per week.

Text: Bold, *THE PLANT KINGDOM*

B 110: The Animal Kingdom

Instructor: **Prof. Crosby**

An evolutionary review of the animal kingdom with reference to the classification, morphology and life cycles of representatives of the Protozoa and the metazoan phyla. An introduction to vertebrate embryology and vertebrate histology will also be considered.

Winter semester — 3 lecs and 4 labs per week.

Text: Boolootian and Stiles, *COLLEGE ZOOLOGY* (9th edition)

B 200: Cell Biology

Instructor: **Prof. Crosby**

BIOLOGY

An introduction to the structure and function of procaryotic and eucaryotic cells. Emphasis will be placed on the ultrastructure and biochemical significance of cellular organelles. Topics to be considered will include: bioenergetics; biosynthesis of macromolecules; regulation of metabolic processes; photosynthesis; glycolysis; respiration; membranes; nature of the nerve impulse and action potential; and molecular biology of muscle.

Fall semester—3 lecs per week plus a major assignment.

Text: Novikoff and Holtzman, *CELLS AND ORGANELLES*

B 220: Microbiology for Engineers

Instructor: **Prof. Stratton**

A general survey of the microbial world with emphasis on types of micro-organisms, naming, structure, growth, metabolic reactions, energy transformations, culturing, methods of control, and population dynamics. Special attention will be given to the use of micro-organisms in areas of agricultural technology such as food, milk, silage, livestock waste management, enzymes and fermented beverages. The role of micro-organisms in nitrogen fixation, ruminant digestion, antibiotic production, petroleum prospecting and material spoilage, will be discussed.

Fall semester—3 lecs per week.

B 225: Microbiology

Instructor: **Prof. Stratton**

A general introduction to microbiology. Topics include: history; morphology; structure; cultivation; reproduction; metabolism; genetics; classification and control of micro-organisms. The importance of micro-organisms to soil productivity, foods, industry, veterinary science, public health and sanitation will be discussed.

Winter session—3 lecs and 3 labs per week.

Text: Pelezar, Reid and Chan, *MICROBIOLOGY* (4th edition)

B 240: Introduction to Genetics

Instructor: **Prof. Padmanathan**

Study of heredity and variation in plants and animals, including man; the relationships of genetics to evolution and breeding practices.

Fall semester—3 lecs and 2 labs per week.

Text: To be announced

B 245: Agricultural Genetics
Instructor: **Prof. Padmanathan**
Prerequisite: **B 240**

Further study of genetic material and population genetics. Emphasis is placed on application of genetics to plant and animal improvement.

Winter semester—2 lecs and 2 labs per week.

Text: To be announced

B 255: Plant Protection
Instructor: **Prof. McFadden**

An introduction into the principles of protecting plants from diseases, insects and weeds. Included will be a study of the more important problems affecting crops in the Maritimes. The safe use and handling of fungicides, insecticides and herbicides is emphasized. Information on the chemistry, mode of action, formulations, and compatibility of pesticides is covered as well as the Pesticide Act.

Fall semester—3 lecs and 3 labs per week.

B 260: Plant Physiology
Instructor: **Prof. Eaton**

A study of the different functions of the plant, including: growth; photosynthesis; mineral nutrition; water relations and translocation of solutes; plant orientation; development and reproduction.

Winter semester—3 lecs and 2 labs per week.

Text: Noggle and Fritz, *INTRODUCTORY PLANT PHYSIOLOGY*

BIOLOGY

B 270: Ecology

Instructor: **Prof. Prange**

An introductory course dealing with ecological principles as they relate to individuals, populations and communities. The interactions between organisms and the physical environment will be discussed, along with the various types of communities found in the Atlantic Provinces.

Fall semester—3 lecs and 3 labs per week.

Text: Smith, *ELEMENTS OF ECOLOGY AND FIELD BIOLOGY*



CHEMISTRY

C 01: **Chemistry**

Instructor: To be announced

This introductory course will emphasize measurement in chemistry, matter and energy, atomic structure, electronic arrangement of the atom and chemical bonding. The periodic table will be studied and considerable emphasis placed on the use of symbols, formulae, equations and reactions. Some time will also be spent on chemical kinetics, problem solving, solutions and electrolysis, acid-base reaction.

Winter semester—3 lecs and 2 labs per week.

C 12: **Soil Physics**

Instructor: To be announced

A course designed to emphasize the importance of physical properties of soils as related to fertility and productivity. Soils are studied with particular reference to soil composition, texture, structure, clay content, organic matter, soil water, soil air, soil temperatures, compaction, drainage, soil development processes and soil profiles. Atlantic Provinces soils are examined in the laboratory to assist students in understanding and managing soils from a physical aspect.

Fall semester—3 lecs and 2 labs per week.

Text and laboratory manual: Kohnke, *SOIL PHYSICS* (2nd edition) and Foth, *FUNDAMENTALS OF SOIL SCIENCE*

C 13: **Soil Chemistry**

Instructor: To be announced

This course is a study of the chemical properties of soils and chemical reactions associated with soil components and additives as fertilizers, limestones and organic materials as they relate to plant growth. The relationship of such materials in the soil to growing crops and soil enhancement is developed. As well, individual nutrient elements are studied.

Winter semester—3 lecs and 2 labs per week.

Text: Foth, *FUNDAMENTALS OF SOIL SCIENCE*

CHEMISTRY

C 14: **Agricultural Chemistry**

Instructor: **Prof. Hawley**

This course will stress the application of basic chemistry to the agricultural industry. Topics will include: chemical arithmetic; protection chemicals; sewage disposal; explosives; energy; iron; useful materials from the earth, sea and air, chemurgy, water, metallurgy, nuclear chemistry, chemical hazards. Students will also gain an introduction to organic chemistry, applied biochemistry, identifying carbohydrates, proteins, fats, oils and the vitamins, enzymes, hormones and nucleic acids.

Fall semester—3 lecs and 2 labs per week.

Text: Jones et al, *CHEMISTRY MAN AND SOCIETY* (3rd edition)

C 40: **Chemistry Laboratory Techniques I**

Instructor: **Prof. Robinson**

An introduction to general chemistry techniques relating to normal laboratory procedures. Instruction in the use and handling of toxic chemicals; the potential hazards associated with various pieces of laboratory equipment; laboratory reports; glass working; responsibilities of a chemistry laboratory worker; the mathematical calculation of typical chemical problems. The laboratory exercises will serve as an introduction to some of the chemicals, methods and equipment used in the normal chemistry laboratory.

Fall semester—4 labs per week.

Text: To be announced

C 41: **Chemistry Laboratory Techniques II**

Instructor: **Prof. Robinson**

A course designed to assist students in organizing, understanding, using and evaluating chemical calculations and problems. The material presents a practical foundation for techniques of solving chemical laboratory problems in the preparation of solutions, expressions of concentration, dilution problems, preparation of graphs, calculations in gravimetric and titrimetric analysis and miscellaneous calculations. The subject material will also deal with various hazards encountered in a chemistry laboratory.

Winter semester—2 labs per week.

Text: To be selected

C 42: Organic Chemistry

Instructor: **Prof. Payne**

An introductory course designed to familiarize the student with the theories and principles of organic chemistry as they apply to certain basic classes of organic compounds including alkanes, alkenes, alkynes, polyolefins, aromatic hydrocarbons, alcohols and mercaptans. The nomenclature of these classes of compounds and their application to plant and animal life is stressed.

Laboratory procedures are correlated with lecture material with modern procedures and techniques being employed to illustrate the preparation, extraction, purification, properties and reactions of various organic compounds discussed.

Fall semester—3 lecs and 4 labs per week.

Text: To be announced

Laboratory Manual: Mimeographed procedures

C 43: Bio-Organic Chemistry

Instructor: **Prof. Payne**

Prerequisite: **C 42**

A continuation of the introduction to the basic classes of organic compounds is presented in this course. Aldehydes, ketones, amines, carboxylic acids and their derivatives are studied. The student is also introduced to biochemistry through a preliminary study of carbohydrates, lipids, proteins, nucleic acids, vitamins, hormones, and enzymes.

Laboratory exercises closely parallel the topics presented in lecture and are designed to make the student aware of the properties and reactions characteristic of the organic and biochemical compounds studied.

Winter semester—3 lecs and 4 labs per week.

Text: To be announced

Laboratory manual: Mimeographed procedures

C 44: Instrumentation I

Instructors: **Profs. MacLean, Robinson and Mrs. Blackie**

An introduction to the theory and practical basic skills of

CHEMISTRY

the more commonly used instrumental methods of analysis. The areas covered are: calorimetry including auto-analyser techniques, atomic absorption, flame photometry, turbidimetry, polarimetry and refractometry.

Winter semester—2 lecs and 3 labs per week.

Text: James W. Robinson, *UNDERGRADUATE INSTRUMENTAL ANALYSIS*

C 45: **Qualitative Analysis**

Instructor: **Prof. Hawley**

Semimicroanalysis is used to evaluate the qualitative nature of inorganic and organic agricultural materials. Theory includes: separations and reactions of Groups I-IV cations and anions; solutions; equilibria; Law of Mass Action; solubility products; hydrolysis; common ion effect; electrolytes; electrolysis; redox reactions; complex ions; oxidation potentials; pH indicators, buffers.

Fall semester—3 lecs and 4 labs per week.

Text: Layde and Busch, *INTRODUCTION TO QUALITATIVE ANALYSIS*

C 46: **Quantitative Analysis**

Instructor: **Prof. MacConnell**

Prerequisite: **C 45**

This course introduces the student to basic analytical principles and techniques. The lecture portion of the course includes the evaluation of analytical data, preparation of samples for analysis, principles of gravimetric analysis, acid-base titrations, oxidation-reduction methods including potentiometric titrations, precipitation and complex formation titrations, colorimetry and an introduction to instrumentation. The laboratory portion of the course is designed to illustrate the analytical principles studied in lecture and to enable the student to develop good analytical technique. Wherever possible, agricultural materials are used for analysis.

Winter semester—3 lecs and 4 labs per week.

Text: Peters, Hayes and Hieftje, *A BRIEF INTRODUCTION TO MODERN CHEMICAL ANALYSIS*

C 70: Instrumentation IIInstructor: **Prof. MacLean**

A study of the more advanced methods of absorption and emission spectroscopy and an introduction to thermo and electro chemistry. The following methods are studied: ultra violet and infrared absorption; spectroscope and optical emission spectograph; calorimetry; potentiometry including specific ion electrodes and conductivity.

Fall semester—3 lecs and 4 labs per week.

Text: James W. Robinson, *UNDERGRADUATE INSTRUMENTAL ANALYSIS*

C 71: Instrumentation IIIInstructor: **Prof. MacLean**

A continuation of the study of the theory and practical techniques of electrochemistry followed by a study of instrumental separation techniques and an introduction to radioactivity measurements. The topics covered are: electrolysis; polarography; gas-liquid; paper; thin-layer; column and ion exchange chromatography; electrophoresis and radioactivity.

Winter semester—3 lecs and 4 labs per week.

Text: James W. Robinson, *UNDERGRADUATE INSTRUMENTAL ANALYSIS*

C 73: Laboratory Organization and ManagementInstructor: **Prof. Langille**

A course designed to familiarize the students with the design, planning, organization and operation of modern chemistry laboratories. As well, the recording and keeping of records and reports of analytical results is studied. Specifically arranged for Chemistry Laboratory Technology students, the course places emphasis on the understanding of all phases of laboratory operation with special reference to a technologist's area of participation in it.

Winter semester—2 lecs and 4 labs per week.

Text: To be selected

CHEMISTRY

C 74: Glass Blowing

Instructor: **Mr. Higgins**

The introduction of students to the art of blowing glass; familiarization with glass blowing procedures and methods; utilization of methods and materials to modify, repair and construct laboratory glass equipment.

Fall semester—4 labs per week.

C 75: Food Chemistry I

Instructor: **Prof. Robinson**

Prerequisite: **C 42, C 43, C 45, C 46**

A study of the chemistry and technology of carbohydrates, fats and proteins. Attention will also be directed towards the basic principles involved in their determination in foods and feeds.

The laboratory will deal with the qualitative and quantitative physical and chemical techniques used in the analysis of foods and feeds.

Fall semester—3 lecs and 4 labs per week.

Text: Meyer, *FOOD CHEMISTRY*

C 76: Food Chemistry II

Instructor: **Prof. Robinson**

A study of the composition, chemistry and technology of various products such as milk, eggs, meats, and cereals.

The laboratory will deal with the qualitative and quantitative physical and chemical techniques used in the analysis of agricultural products.

Winter semester—3 lecs and 4 labs per week.

Text: Meyer, *FOOD CHEMISTRY*

C80: Chemistry Project

Instructors: **Chemistry Staff**

A chemistry project and seminar program lasting the entire year. It is organized on an individual basis with each student.

Both semesters—6 to 8 lab periods per week as assigned.

C 100: Chemical Principles
 Instructor: **Prof. MacConnell**

A study of atomic theory, periodicity, chemical reactions, thermo chemistry, geometrical forms of molecules, chemical equilibrium and oxidation-reduction reactions. Also included is an extensive study of the chemistry of solutions of weak electrolytes.

Fall semester—3 lecs and 4 labs per week.

Text: Masterton and Slowinski, *CHEMICAL PRINCIPLES USING THE INTERNATIONAL SYSTEM OF UNITS* (4th edition)

C 110: Organic Chemistry
 Instructor: **Prof. Hawley**
 Prerequisite: **C 100**

A study of basic classes of organic compounds including: alkanes; alkynes; petroleum and petrochemicals; cycloparaffins; alcohols; aldehydes; ketones; alkyl halides; monocarboxylic acids; acid anhydrides; salts; amides; ethers; and amines.

Winter semester—3 lecs and 4 labs per week.

Text: Morrison and Boyd, *ORGANIC CHEMISTRY* (3rd edition)

C 200: Biochemistry I
 Instructor: **Prof. MacConnell**
 Prerequisite: **C 110**

This course consists of a study of the following topics: biological elements; buffers; amino acids and proteins; lipids; membrane structures; carbohydrates; nucleic acids; vitamins; hormones and enzymes.

Fall semester—3 lecs and 4 labs per week.

Text: Lehninger, *BIOCHEMISTRY* (2nd edition)

C 205 Biochemistry II
 Instructor: **Prof. MacConnell**
 Prerequisite: **C 200**

This course includes a study of the following topics: en-

CHEMISTRY

zyme kinetics; mechanisms of enzyme action; digestion and absorption; bioenergetics; catabolism of carbohydrates; lipids and nitrogen compounds; selected biosyntheses; nitrogen fixation and metabolism control mechanisms.

Winter semester—3 lecs and 4 labs per week.

Text: Lehninger, *BIOCHEMISTRY* (2nd edition)

C 220: **Introduction to Soil Science**

Instructor: **Prof. Langille**

Prerequisites: **C 100, C 110**

The general principles of soil science relating to the origin, the development and classification of soils; the physical and chemical properties of soils and their relation to soil management, crop production, soil problems, land use, trace elements and pesticides in soils.

Fall semester—3 lecs and 4 labs per week.

Text: Brady, *THE NATURE AND PROPERTIES OF SOIL*, (8th edition)

ECONOMICS AND BUSINESS

EB 01: **Agricultural Industry**

Instructor:

The major emphasis will be on information about the agricultural industry, rather than specific agricultural topics or skills. The course will be organized into 4 majors (segments): Animal Science; Plant Science; Agricultural Business; Agricultural Mechanization. During each segment on-campus instruction will be supplemented by industry visits to both farm and farm-related activities.

Winter semester — 2 lecs and 4 labs per week.

EB 10: **Accounting**

Instructor: **Prof. Arnfast**

This is a study of the basic principles and procedures relevant to the accounting function of a business. Some of the topics discussed in the course are: recording transactions in an accounting system, year-end adjustments, purchases and sales, control of cash transactions and financial statements.

Fall semester — 3 lecs and 2 labs per week.

Text: Meigs et al, *ACCOUNTING: THE BASIS FOR BUSINESS DECISIONS*

EB 11: **Applied Accounting & Taxation**

Instructor: **Prof. Arnfast**

Prerequisite: **EB 10**

The emphasis of this course will be the application of accounting principles and procedures to farm accounting situations. Some of the topics discussed in the course are: fixed assets and depreciation, inventories, payrolls, financial statements. Considerable time will be spent on the study of Canadian Income Tax laws as they apply to the farm business.

Winter semester — 3 lecs and 2 labs per week.

EB 12: **Macro Economics**

Instructor: **Prof. Tait**

An introduction to the study of macro economics in a Canadian context. Topics covered include: national accounts,

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public finance, money and banking, and international trade. Current problems in the Canadian economy are drawn on to emphasize the theory.

Fall semester — 3 lecs per week.

Text: Armstrong, *THE CANADIAN ECONOMY & ITS PROBLEMS*

EB 13: Micro Economics

Instructor: **Prof. Tait**

An introduction to the theory of the firm. The course examines the theory of demand and supply, distribution of income, forms of business organizations in Canada, and the levels of competition in the agricultural industry. Application of the various theories to explain the agricultural industry is stressed.

Winter semester — 3 lecs per week.

EB 40: Marketing Practices

Instructor: **Prof. Ells**

The current practices involved in marketing farm products produced in the Atlantic Provinces are studied. The condition affecting these practices and the groups of people that can bring about changes are identified.

Special attention is paid to consumer behaviour, supplier behaviour, market structures, price determination, marketing boards, and marketing commissions.

Students visit a series of firms and organizations involved in marketing farm products. The managers of these organizations assist with the instruction.

Fall semester — 2 lecs and 3 labs per week.

EB 41: Business Law

Instructor: **Prof. Arnfast**

This course will introduce several topics relevant to the management of a business. The major topics to be discussed and studied are: types of business organizations, legal structure in Canada, criminal and civil law, contracts, mortgages, liens, insurance and marketing boards. Emphasis will be placed on relating the above topics to farm and farm-related business.

Winter semester — 3 lecs per week.

EB 42: Applied Farm Management

Instructor: **Prof. Tait**

The course is designed to transfer classroom teaching to real farm situations. Students will have an opportunity to apply the principles of farm management on production farms. Some of the requirements will be: to analyze farm records, do credit analysis, develop farm plans, and evaluate machinery, livestock and crop decisions, based on actual farm cases.

Winter semester — 2 lecs and 4 labs per week.

EB 43: Project

Instructors: **Department Staff**

This is an opportunity to examine, in detail, specific agricultural topics of interest to the students. Projects will be organized and carried out by the students under the supervision of various staff members.

Fall semester — 5 labs.

EB 72: Farm Project

Instructors: **Committee headed by member of the Farm Management Department**

The farm project relates the college course program with the on-farm training. It stresses the application of information to a specific farm situation.

The farm for this project may be the home farm or any other farm. An intimate knowledge of the farm is necessary. The student, therefore, must have access to the farm and to detailed information about it.

The prepared project consists of three sections:

- (a) a detailed inventory of land, building, machinery and all other farm resources. An analysis of the present farm operation;
- (b) an outline of the student's objectives and projected plans for the farm;
- (c) a practical step-by-step (year-by-year) program for the changes necessary to reach these goals.

The farm project is introduced to the student in the first

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technology year, before the commencement of the seven months of on-farm training. All the required data for the farm inventory is collected during the on-farm training period. The final work on the prepared project is done in the last college semester. Though most of the work is done outside of the scheduled class time, one afternoon per week is scheduled for special instruction and for presentations. Each student is required to present a minimum of one seminar on his farm plan to the project class and the instructor committee.

Winter semester — 5 labs per week.

EB 110: Economics of Agriculture

Instructor: **Prof. Arnfast**

This introductory course is designed to survey the areas of concentration in the agricultural economics and agribusiness discipline. Throughout the course, economic and business principles will be presented and applied in an agricultural context. This will provide the student with an introduction to the areas of the discipline as well as a means toward understanding the structure and objectives of Canadian and Atlantic agriculture. Specific topic areas in this course include: introductions to the market model, market and price analysis, production economics, farm agribusiness analysis, policy and resources development.

Winter semester — 3 lecs per week.

EB 200: Micro Economics

Instructor: **Prof. Stackhouse**

This course introduces the principles of micro economic theory. Alternate models of consumer and firm behavior are examined. Areas of emphasis include the evaluation of individual and market demand and supply analysis, measurement and interpretation of elasticity, the theories of consumer choice, cost analysis of the firm, market classifications of competition, and evaluation of the firm in the various forms of competition.

Fall semester — 3 lecs per week.

EB 210: Accounting

Instructor: **Prof. Arnfast**

This is a study of the basic principles of procedure relevant

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to the accounting function of a business firm. Project work with farm and farm-related business records is included in the course to assist the student in acquiring a working knowledge of the above principles and procedures.

Fall semester — 2 lecs and 2 labs per week.

EB 220: Production Economics

Instructor: **Prof. Tait**

An introduction to the study of economic principles used to analyze production and resource use in agriculture. Areas of emphasis include the economic examination of the factor-factor, factor-product, and product-product relationships of the farm production system.

Practical examples and lab exercises are used to illustrate and reinforce the concepts presented in the classroom.

Winter semester — 2 lecs and 4 labs per week.

EB 230: Principles of Marketing

Instructor: **Prof. Ells**

This course is designed to introduce the student to the principles of marketing. However, an attempt will be made to relate these principles to what is actually happening in the marketing of Canada's agricultural products. The course utilizes both text and case material to give the student an understanding of the activities underlying the flow of goods from producer to consumer.

Fall semester — 3 lecs per week.

EB 240: Farm Management

Instructor: **Prof. Tait**

The principles and methods of organizing and analyzing farm businesses are examined. Practical problems associated with financial analysis, planning, capital budgeting, resource use and credit acquisition are included. The role of the farm manager is identified throughout.

Fall semester — 2 lecs and 4 labs per week.

EB 255: Macro Economics

Instructor: **Prof. Stackhouse**

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An introduction to the study of economics. The course is designed to acquaint the student with the main elements of macro economic theory. Emphasis will be placed on the application of theories to current Canadian economic problems. Topics covered include: system overview; national income analysis; monetary policy; fiscal policy and international trade.

Winter semester — 3 lecs per week.

EB 260: Mathematical Economics

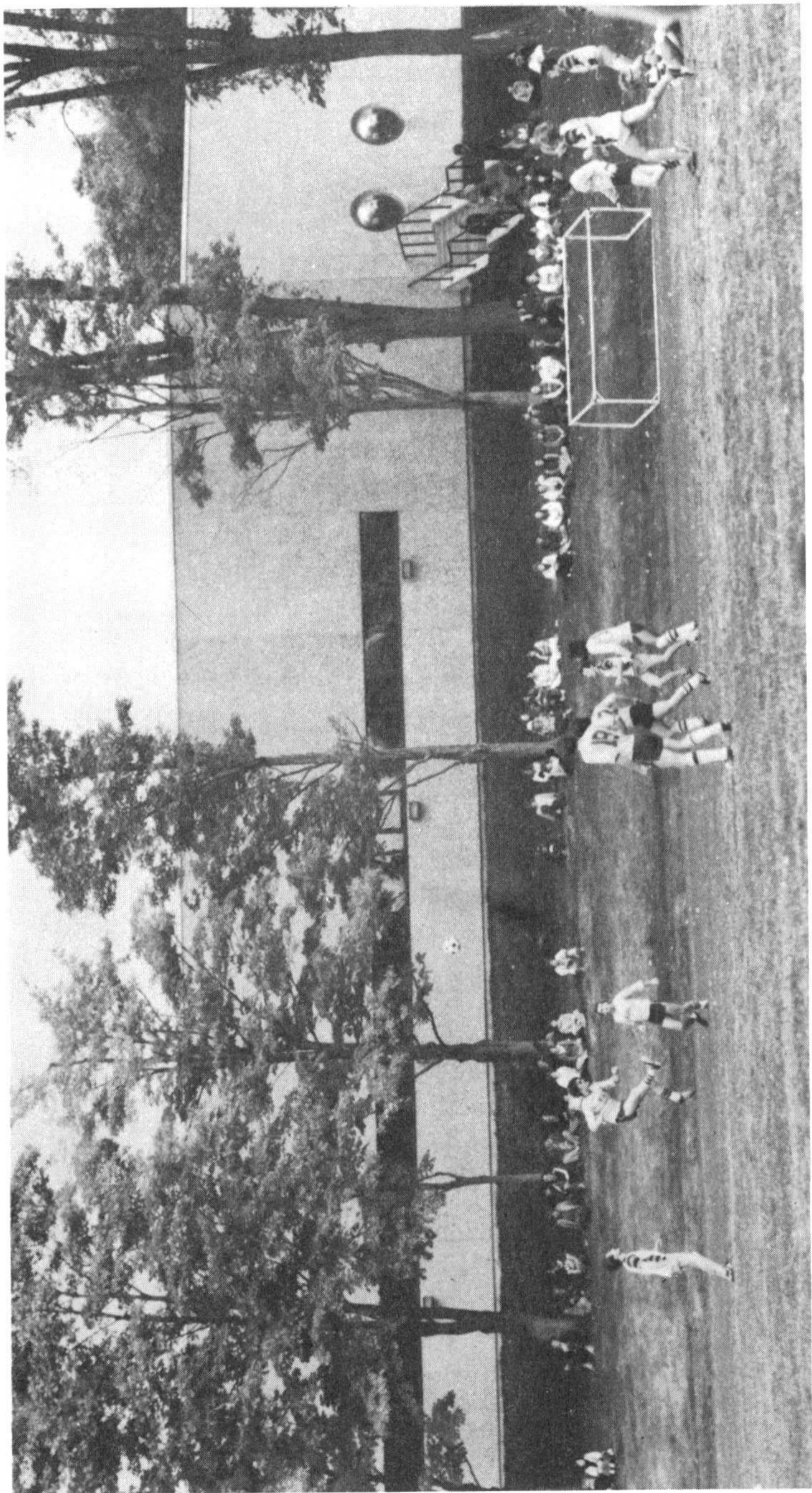
Instructor: **Prof. Stackhouse**

Prerequisites: **MP 100, EB 110, EB 200**

Introduction to the frequently used mathematical methods of economic analysis. It also provides the student with the basics required in more advanced economics courses that have a quantitative content.

Areas of concentration are: I. Elements of Mathematical Economics Models; II. Linear Models and Matrix Algebra; III. Linear Programming; IV. Applications of Classical Calculus to Economic Problems; and V. Optimization Theory.

Winter semester — 3 lecs per week.



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H 01: **Language Development**

Instructor: **Prof. Sanger**

The purposes of this course are to: (1) ensure that pre-technical students have an adequate grounding in grammar, spelling, and punctuation to meet the requirements of H 10 Technical Writing; (2) to give students exercise in technical communication; (3) to read and write about Canadian history and literature.

The course will consist of classroom instruction in grammar, spelling, and punctuation. There will be heavy emphasis upon the writing of tool and machine descriptions, note-taking, letter writing, and essays. At least two Canadian novels will be studied. There will be one major term paper and a final examination.

Winter semester — 3 lecs per week.

H 10: **Technical Writing**

Instructor: **Prof. Sanger**

The objective of this course is to provide instruction in: (1) basic scientific report and review paper writing; (2) grammar and spelling; (3) business letter writing, with specific reference to the employment application letter and data sheet; (4) the cultural, social, and historical background of agriculture and its related trades. Students must write a major term paper.

Fall and Winter Semesters — 3 lecs per week.

H 11: **Modern Literature**

Instructor: **Prof. Sanger**

The objective of this course is to study five or six modern North American, European, or Russian authors. Books by Greene, Pasternak, Atwood, Frost, Silone, Ringuet, Steinbeck, and Hemingway have been used. Students must write a major term paper.

Winter semester — 3lecs per week.

H 12: **Leadership Development**

Instructor: **To be announced**

A course designed to assist students in developing discus-

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sion techniques, leadership styles and skills in group dynamics. The tools of communication and related leadership skills will be applied to problem-solving exercises involving study groups on work simplification topics. Through group study, practical solutions will be applied to work problems with the object of finding easier and better ways to do special tasks, thus avoiding waste of time, money, materials, equipment and human resources. The role of community and agricultural organizations in initiating change is also considered.

Winter semester — 3 lecs per week.

H 20: **The Human Body and Fitness**

Instructors: **Profs. Marchant and J. Smith**

This course is designed to give students a basic understanding of human anatomy and physiology and its relationship to fitness. Emphasis will be placed on applied anatomy and kinesiology as well as the effects of physical activity on the physiological processes in the human body (exercise physiology).

Most lab work will take place in the gymnasium and will stress testing, lifelong recreation activities and their exercise value, and training principles.

Fall semester—2 lecs and 2 labs per week.

H 120: **Sociology I**

Instructor: **Prof. MacEachern**

Through assigned readings from the text and in lectures, students will be challenged to examine the question of the extent to which man is predetermined and/or predefined by his society. In this way, insight is given into basic sociological concepts.

The first part of the course will focus on the individual and the socialization process. The second part will deal with concepts used to analyze the social organization of society. The third part will centre on concepts related to social change.

An in-depth study is made of society from a sociological base with the examination of a contemporary book.

Fall semester—3 lecs per week.

Text: Landis, *SOCIOLOGY CONCEPTS AND CHARACTERISTICS* (3rd edition)

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H 125: **Sociology II**

Instructor: **Prof. MacEachern**

An examination of society will be undertaken with emphasis on man in community with consideration of: affluence and poverty; the family; human values within society.

Winter semester — 3 lecs per week.

Texts: Streib, *THE CHANGING FAMILY; ADAPTATION AND DIVERSITY*;
Mannes, *LAST RIGHTS*;
Frankl, *MAN'S SEARCH FOR MEANING*

H 140: **Personnel Management**

Instructors: **Profs. MacLeod and Saxon**

This course introduces students to the basic concepts needed to understand the behaviour of people at work. Included in these concepts are topics associated with motivation, communication, and group relationships. Emphasis is placed on how students, as potential supervisors, may apply behavioural concepts in the work place and thereby contribute to improved employee performance. Students also examine the features of supervisory styles, elements of job design, effective introduction of change, and overcoming barriers to communication. In addition to lectures, films and assigned readings, students become involved in case studies both on an individual and group basis. Case studies enable students to develop their decision-making abilities and experience group dynamics.

Both semesters — 3 lecs per week.

Text: Reber and Terry, *BEHAVIOURAL INSIGHTS FOR SUPERVISION*

H 150: **Agriculture Today**

Instructor: **Prof. Cock**

The course will deal principally with the agricultural industry in the Atlantic Provinces. The influences of history, research, farm organization and other factors will be discussed. The issues of world food problems, regional agricultural self-sufficiency and the changing public attitude towards agriculture will be considered.

Winter semester—3 lecs per week.

H 200: Technical Writing and English and American Authors
Instructor: **Prof. Sanger**

The objective of this course is to provide instruction in: (1) basic scientific report and review paper writing; (2) business letter writing, with specific reference to the employment application letter and data sheet; (3) American and British literature from the end of the eighteenth to the middle of the nineteenth centuries. Students must write a major term paper in the literature part of the course.

Fall semester—3 lecs per week.

H 205: Canadian Literature
Instructor: **Prof. Sanger**

The objectives of this course are to: (1) provide a general survey of Canadian literature from colonial times to the present; (2) examine specifically four or five twentieth century Canadian novels. Books by Callaghan, MacLennan, Ringuet, Aguin, O'Hagan, Atwood, and Buckler have been used. Students must write a major term paper.

Winter semester—3 lecs per week.

H 210: Communications and Extension Methods
Instructor: **Mr. Mildon**

The course will develop the student's awareness of basic patterns of communications in an agricultural context. Emphasis is placed on practical use of various types of communications media which are commonly used in agricultural extension work.

The first part of the course concentrates on developing the personal and group communications skills of the student. In the second part, the student explores various kinds of media including newspapers, radio, television and film.

Assignments include preparing advertising or publicity, making a radio tape, the use of photography, etc. The term project requires the students to produce an audio-visual presentation with an integrated sound track.

Winter semester—1 lec and 2 labs per week.

H 220: Introductory French
Instructor: **Prof. Cipolla**

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This course aims to develop the student's use of French in the four language skills of listening, speaking, reading, and writing. Use will be made of a basic text and a workbook and various supplementary materials. These will include French films, newspapers, additional texts, recordings of speeches by public figures, and learning kits. In addition it is planned to have the students do an individual project. A number of hour-long evaluations will be given and the average of these will be used to arrive at a summative mark.

Winter semester—3 lecs per week.

Text: Valette and Valette, *CONTACTS, LANGUE ET CULTURE FRANCAISE*

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MP 01: **Mathematics**

Instructor: **To be announced**

Mathematical concepts are applied to problems in agriculture. The topics are: mathematical operations; percentage; linear and simultaneous equations; quadratic equations; exponents; logarithms; math of finance; ratio; proportion; variation. The S1 system of units is used throughout the course.

Winter semester—2 lecs and 2 labs per week.

MP 14: **Computational Methods**

Instructor: **To be announced**

A course to develop problem-solving and decision-making abilities, and to develop computational techniques, both manual and machine. The course is based around the computer; and mini and micro computer use in decision making and computations is stressed.

The problems are of both a scientific and managerial nature, emphasizing agricultural applications. Some use of statistics is also part of the course.

The arithmetic and algebraic skills needed for the course are developed as the needs arise through self-instructional modules.

Winter semester—1 lec and 3 labs per week.

MP 15: **Physics**

Instructor: **Prof. Buckler**

The Physics course for technicians is designed to bring students deficient in Physics principles up to the grade XII level in topics important to the practice of agriculture. Such topics as: measurement; mechanics; heat; and principles of electricity in both direct and alternating current will be introduced. The laboratory part of the course will consist of demonstration experiments and problem sessions.

Fall and winter semester—3 lecs and 2 labs per week.

MP 40: **Electricity and Electrical Measurements**

Instructor: **Prof. Buckler**

Part I is a basic course in electricity and electrical mea-

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surements. Emphasis is placed on the study of series and parallel circuits, Ohm's Law and Kirchhoff's Law. Both direct current and alternating current problems and exercises are employed. Elements of magnetism, resistance, capacitance, inductance, impedance, power and resonance of the A.C. circuit are considered.

The laboratory part of the course involves carrying out actual electrical measurements of a technical nature, in addition to verifying the laws studied. The techniques of handling and using electrical instruments are stressed and combined with theory to develop solutions to practical problems.

Fall semester—2 lecs and 2 labs per week.

Text: Buhan and Schmitt, *TECHNICAL ELECTRICITY AND ELECTRONICS*

MP 41: **Light and Optics** Instructor: **Prof. Buckler**

Part II is a course in light and optics. It consists of the study of: photometry; regular and diffused reflections; laws of reflection; mirrors; images; mirror formulas; optical density; index of refraction; laws of refraction; critical angle; lenses; ray diagrams; images; color; constructive and destructive interference; diffraction and polarization. In the laboratory part of the course, the student becomes involved in optical measurements that verify and demonstrate the elements studied, and extend the techniques of solving problems.

Winter semester—2 lecs and 2 labs per week.

Text: To be announced

MP 70: **Basic Statistics** Instructor: **Prof. Padmanathan**

Populations and samples, frequency distributions, sampling theory, tests of hypotheses, linear regression and correlation, analysis of variance, discussion of experimental designs.

Fall semester—3 lecs per week.

Text: To be announced

MP 71: Computer Programming

Instructor: **Prof. Madigan**

This course provides an introduction to the methods of computer programming through the BASIC language. Students will become familiar with the operation of a time-sharing system by running their own programs.

Winter semester—equivalent to two lecs per week.

MP 090: Introductory Physics

Instructor: **Prof. Saxon**

An introductory course for entering students who do not have the equivalent of Nova Scotia Grade XII Physics. The course topics are: mechanics; heat; light and electricity. The laboratory emphasizes the experimental foundations of Physics and allows the student to acquire skills in measurement through practice.

Fall semester—3 lecs and 4 labs per week.

Text: To be announced

MP 100: Calculus and Analytic Geometry I

Instructors: **Profs. Fraser and Madigan**

A study of limit and the derivative, with applications to maxima and minima, velocity and acceleration, differentiation of the trigonometric, exponential and logarithmic functions. Topics from Analytic Geometry are covered at appropriate stages throughout the course.

Fall semester—4 lecs per week.

Text: Swokowski, *CALCULUS—A FIRST COURSE*

MP 105: Calculus and Analytic Geometry II

Instructors: **Profs. Fraser and Madigan**

A continuation of MP 100 dealing mainly with the integral calculus. Both definite and indefinite integrals will be studied, with application to areas, volumes, hydrostatic pressure and work. The final part of this course will deal with sequences and series. As in the case of MP 100, topics from Analytic Geometry will be covered at appropriate stages of this course.

Winter semester—4 lecs per week.

Text: Swokowski, *CALCULUS—A FIRST COURSE*

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MP 106: **Calculus for Engineers**

Instructor: **Prof. Saxon**

The Fundamental Theorem of Calculus and the indefinite and definite integral are studied, with application to the solution of engineering problems. Topics include: Analytic Geometry; series; sequences; exponential function; logarithmic function; numerical integration.

Spring semester—4 lecs and 2 labs per week.

Text: To be announced

MP 110: **Modern Physics**

Instructor: **Prof. Smith**

A treatment of the conceptual foundations including: mass; length; time; kinematics; Newton's Laws; frames of reference; relative motion including Galileon Relativity and Special Relativity; momentum; energy and the conservation principle and the conceptual foundations.

The quantum nature of energy and an introduction to quantum mechanics; an investigation of the nucleus, with regard to nuclear structure, binding energy, and nuclear size; nuclear reactions, particles and fission are discussed.

Winter semester—3 lecs and 4 labs per week.

Text: Kone and Sternheim, *PHYSICS*

MP 120: **Electrical Phenomena**

Instructor: **Prof. Smith**

The physics of electrical and magnetic effects; electric charges; fields and potential; capacitance and dielectrics; electric currents and elementary D.C. circuits; magnetic fields; induced emf; magnetic circuits.

Electrical measurements are carried out as laboratory work.

Winter semester—3 lecs and 2 labs per week.

Text: Sears & Zemansky, *UNIVERSITY PHYSICS*

MP 130: **Physics for Life Sciences I**

Instructor: **Prof. Smith**

Basic Physics principles necessary for the understanding of

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instrumentation and biophysical topics form the core of the course.

Topics include: mechanics; motion and force; concepts of energy; pressure and fluid flow. Calorimetry and heat transfer methods are applied to such topics as basic metabolic rate and size of an animal.

Elementary optics and optical instruments are treated, with application to biological research.

Fall semester—3 lecs and 4 labs per week.

Text: Kone and Sternheim, *PHYSICS*

MP 135: Physics for Life Sciences II

Instructor: **Prof. Smith**

A continuation of Physics 130. The electric charge, field, potential and simple electric circuits are taken up and their importance in instrumentation explored. The magnetic field is included.

The atom and the nucleus is explored, with relation to the process called radioactivity.

Winter semester—3 lecs and 4 labs per week.

Text: Kone and Sternheim, *PHYSICS*

MP 200: Statistics and Agricultural Experimentation

Instructor: **Prof. Padmanathan**

Prerequisite: **MP 100**

Descriptive statistics; normal frequency distributions; probability; statistical inference; binomial, poisson and chi-square distributions; tests of significance; regression and correlation; sampling; planning of experiments; analysis of variance of simple designs.

Both semesters—3 lecs per week.

Text: To be announced

MP 220: Computer Programming

Instructor: **Prof. Madigan**

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Programming techniques for high speed digital computers. Instruction in FORTRAN and BASIC. Instruction in the CDC 6400 computer operating system.

Fall semester—2 lecs and 2 labs per week.

MP 230: **Multivariable Calculus**

Instructor: **Prof. Madigan**

Prerequisites: **MP 100, MP 106**

Covers: vectors; differential calculus of several variables; multiple integration.

Fall semester—4 lecs and 2 labs per week.

MP 235: **Differential Equations and Linear Algebra**

Instructor: **Prof. Madigan**

Elementary differential equations; first order equations; types of second order equations and solutions; applications to physical problems; vectors and vector products; differentiation; integration; matrices; linear transformations; eigenvalues.

Winter semester—4 lecs and 2 labs per week.

MP 240: **Electric Circuits**

Instructor: **Prof. Smith**

Theory of circuits and power engineering; DC circuits: AC currents and voltages; phasors and complex algebra; AC circuits: current-voltage; power; frequency response; polyphase circuits; transients; magnetic circuits; si phase transformers; electrical machinery; DC machines; alternators; induction and synchronous motors.

Fall semester—3 lecs and 2 labs per week.

Text: Johnson, Hilburn, Johnson, *BASIC ELECTRIC CIRCUIT ANALYSIS*

PLANT SCIENCE



¹⁰PS 14. **Plant Science Skills** Instructor: **To be announced**

The techniques and skills used in plot seeding, forage harvesting, corn harvesting, yield and dry matter determinations are studied. Seed testing, seed stratification, bulb forcing, as well as propagation of hardwood and softwood cuttings are undertaken. Studies in the uses and operation of instruments used to monitor plant growth conditions are undertaken. Automatic watering and feeding of greenhouse crops, various methods of grafting, as well as the preparation of exhibition materials are also studied.

Winter semester—4 labs per week (2 labs per week in Semester A).

Text: (for propagation portion of subject) Hartmann and Kester, *PLANT PROPAGATION*

PLANT SCIENCE

PS 30: **Plant Science**

Instructor: **To be announced**

Selected topics on crop plants with emphasis on characteristics that relate to the selection and adjustment of equipment.

Fall semester—3 lecs and 2 labs per week.

PS 39: **Greenhouse Management**

Instructor: **To be announced**

Prerequisite: **PS ~~44~~ 10**

Types of greenhouses; heating systems; ventilation; relative humidity and automatic controls; culture of individual vegetable and floral crops; and bedding plants.

Fall semester—3 lecs and 2 labs per week.

PS 40: **Field Crops I**

Instructor: **Prof. Bubar**

A study of grasses, legumes and other crops grown for forage or grain; factors influencing adaptation and distribution of these crops. Emphasis is placed on crops and conditions in the Atlantic Provinces.

Fall semester—3 lecs and 2 labs per week.

Text: Martin, Leonard and Stamp, *PRINCIPLES OF FIELD CROP PRODUCTION* (3rd edition)

PS 41: **Field Crops II**

Instructor: **Prof. Bubar**

Prerequisite: **PS 40**

A continuation of PS 40 dealing with establishment, production management, harvesting and storage of forage and grain crops. The overall objective is to produce a basis for sound feed production decisions on livestock farms in the Atlantic Region.

Winter semester—3 lecs and 2 labs per week.

Text: Martin, Leonard and Stamp, *PRINCIPLES OF FIELD CROP PRODUCTION* (3rd edition)

PS 42: Cash Crops and Seed Production

Instructor: **Prof. Bubar**

Prerequisite: **PS 40**

A follow-up to PS 40. It deals with production of field crops for industrial and commercial markets and of pedigreed and non-pedigreed seed production.

Winter semester—3 lecs and 2 labs per week.

PS 43: Berry Crops

Instructor: **To be announced**

Berry crops studied include: strawberries, raspberries, cranberries, blueberries, currants and gooseberries. All aspects of berry production, from planting to marketing is covered, as well as tree fruit production, including harvesting, and visits to orchards and processing plants.

Fall semester—3 lecs and 2 labs per week.

PS 44: Tree Fruit Crops

Instructor: **To be announced**

Prerequisite: **PS 43**

This is a course on the culture and handling of apples, pears, peaches, plums and cherries. Topics studied are: soil management, use of fertilizers, pruning, thinning, harvesting, storage and marketing.

Winter semester—3 lecs and 2 labs per week.

PS 45: Turfgrass I

Instructor: **Prof. Daniels**

A study of cool season turfgrasses, their individual characteristics and value. The relationship of the development of a specific turfgrass and its best growing environment and use are studied. Laboratory periods deal with seasonal applied practices in turfgrass production.

Fall semester—2 lecs and 3 labs per week.

Text: Beard, James, *HOW TO HAVE A BEAUTIFUL LAWN*

PS 46: Turfgrass II

Instructor: **Prof. Daniels**

Prerequisite: **PS 45**

PLANT SCIENCE

A study of the applied management of turfgrass. Topics include establishment and renovation of turfgrass, proper fertilizing, watering, and pest control programmes are covered in detail.

Laboratory periods deal with formation of applied turfgrass care management programmes.

Winter semester—2 lecs and 3 labs per week.

Text: Beard, James, *HOW TO HAVE A BEAUTIFUL LAWN*

PS 49: Potato Production

Instructor: **Prof. Haliburton**

Cultural practices involved in the production of potatoes are discussed in relation to the botanical characteristics of the potato plant. Physiological changes involved in sprouting, tuber initiation, crop development and storage are considered in detail. Seed potato production is given particular attention.

Winter semester—3 lecs and 2 labs per week.

PS 50: Ornamental Horticulture I

Instructor: **Prof. Higgins**

Fundamental principles and industry practices for the growth, selection, moving and maintenance of trees, shrubs and ground covers are discussed as well as the functional uses of these ornamental plants for the contemporary landscape. Plant identification is an important component of this course.

Fall semester—3 lecs and 4 labs per week.

PS 51: Residential Landscape Design

Instructor: **Prof. Higgins**

Prerequisites: **AE 12 and PS 50**

Residential landscape design is studied in detail with special emphasis on a systematic approach to creative solutions to design problems. Plant identification is a major component of this course.

Winter semester—3 lecs and 4 labs per week.

PS 52: Plant Science Project

Instructors: **Profs. Daniels and Haliburton**

A study of an agronomic or horticultural topic, which usual-

ly includes plant growing experimentation that a student pursues in much more detail than is possible in lecture or laboratory course presentations. A student is evaluated on initiative in developing the project, competence in carrying out the practical aspects of it and demonstration of progress towards objectives set when the project is initiated.

Both semesters—Time to be arranged.

PS 53: Vegetable Production

Instructor: **Prof. Haliburton**

Production practices for vegetables grown in the Atlantic region are studied in detail, including botanical and horticultural characteristics, soil and fertility requirements, cultivar selection, pest management, harvesting and storage. Commercial vegetable enterprises are visited.

Fall semester—3 lecs and 2 labs per week.

Text: Ware and McCollum, *PRODUCING VEGETABLE CROPS*

PS 54: Plant Propagation

Instructor: **To be announced**

This course considers the production of plants by both seed and vegetative methods. It includes a detailed study of seed germination and the advantages and disadvantages of this type of reproduction as compared to vegetative reproduction including graftage, layerage, separation and division. A study of seeding and potting composts, rooting mediums and propagating structures and associated equipment is also made.

Fall semester—1 lec and 2 labs per week.

Text: Hartmann & Kester, *PLANT PROPAGATION*

PS 70: Landscape Techniques

Instructor: **Prof. Higgins**

A spring course in which students learn techniques in maintenance and development of lawns, flower beds, shrub borders and hedges. Moving trees and shrubs, pruning and tree surgery are also experienced. Students participate in implementing landscape projects from prepared plans.

Spring term—6 weeks

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PS 71: Arboriculture

Instructor: **Prof. Higgins**

A course with special emphasis on advanced arboriculture including environmental and non-parasitic injuries to trees, bracing and cabling, street trees, and evaluation of shade trees. Plant identification is an important segment of this course. Students are required to submit a plant collection.

Fall semester—3 lecs and 6 labs per week.

PS 72: Landscape Maintenance

Instructor: **Prof. Higgins**

Prerequisite: **PS 50**

This course deals with landscape maintenance. Emphasis is placed on scheduling horticultural work, horticultural maintenance equipment, and pesticides and their applications. Time studies and organization of horticultural tasks will be considered. A calendar of landscape maintenance tasks is developed by the students. Plant identification is an important component of this course.

Winter semester—3 lecs and 6 labs per week.

PS 73: Ornamental Horticulture II

Instructor: **Prof. Higgins**

Prerequisite: **PS 50**

The study of herbaceous plants and their uses in the landscape is pursued. Other special groups of plants such as vines, roses, and indoor landscaping plants are studied.

Fall semester—3 lecs per week.

PS 74: Landscape Design & Construction

Instructor: **Prof. Higgins**

Prerequisites: **PS 50, PS 51 and PS 72**

Advanced landscape design problems and techniques are studied. Topics such as paving materials, site furniture, retaining walls, curbing, roof gardens and planters are covered. A systematic approach to site planning, design, and construction of a design is thoroughly examined.

Winter semester—3 lecs per week.

PS 75: Ornamental Horticulture Project

Instructor: **Prof. Higgins**

The project involves the pursuit of a horticultural topic by a student in much greater detail than is possible in regular lecture and laboratory course presentations. The student is evaluated on initiative, presentation techniques, and competence in carrying out the objectives of the project from the time the study is initiated until it is completed. The topic to be studied must be decided before the end of the fall semester.

Fall semester—4 labs per week.

PS 76: Plant Products Physiology

Instructor: **Prof. Haliburton**

Prerequisite: **B 41 (can be taken concurrently)**

This subject is concerned with the principles of plant physiology as they apply to plant products in storage environments. It deals with management practices associated with the harvesting and storage of crops and the effect of time period and conditions of storage on the quality of the plant products. Storage structures will be studied and representative types of commercial storages will be visited.

Winter semester—3 lecs and 2 labs per week

PS 77: Greenhouse and Landscape Crops

Instructor: **Prof. Daniels**

Location, operation and management of the various structures used in the production of greenhouse and nursery crops are studied. Special attention will be given to the art of growing foliage, flowering and bedding plants used for interior and exterior landscaping.

Winter semester—3 lecs and 2 labs per week.

PS 100: Principles of Crop Production

Instructors: **Profs. Bubar and Daniels**

General principles underlying adaptation, improvement, culture and utilization of agronomic and horticultural crop plants. Special attention is paid to crops and discussion of principles in relation to the crops grown in the region.

Fall semester—3 lecs and 2 labs per week.

Text: Janick, Schery, Woods and Ruttan, *PLANT SCIENCE, AN INTRODUCTION TO WORLD CROPS* (2nd edition)

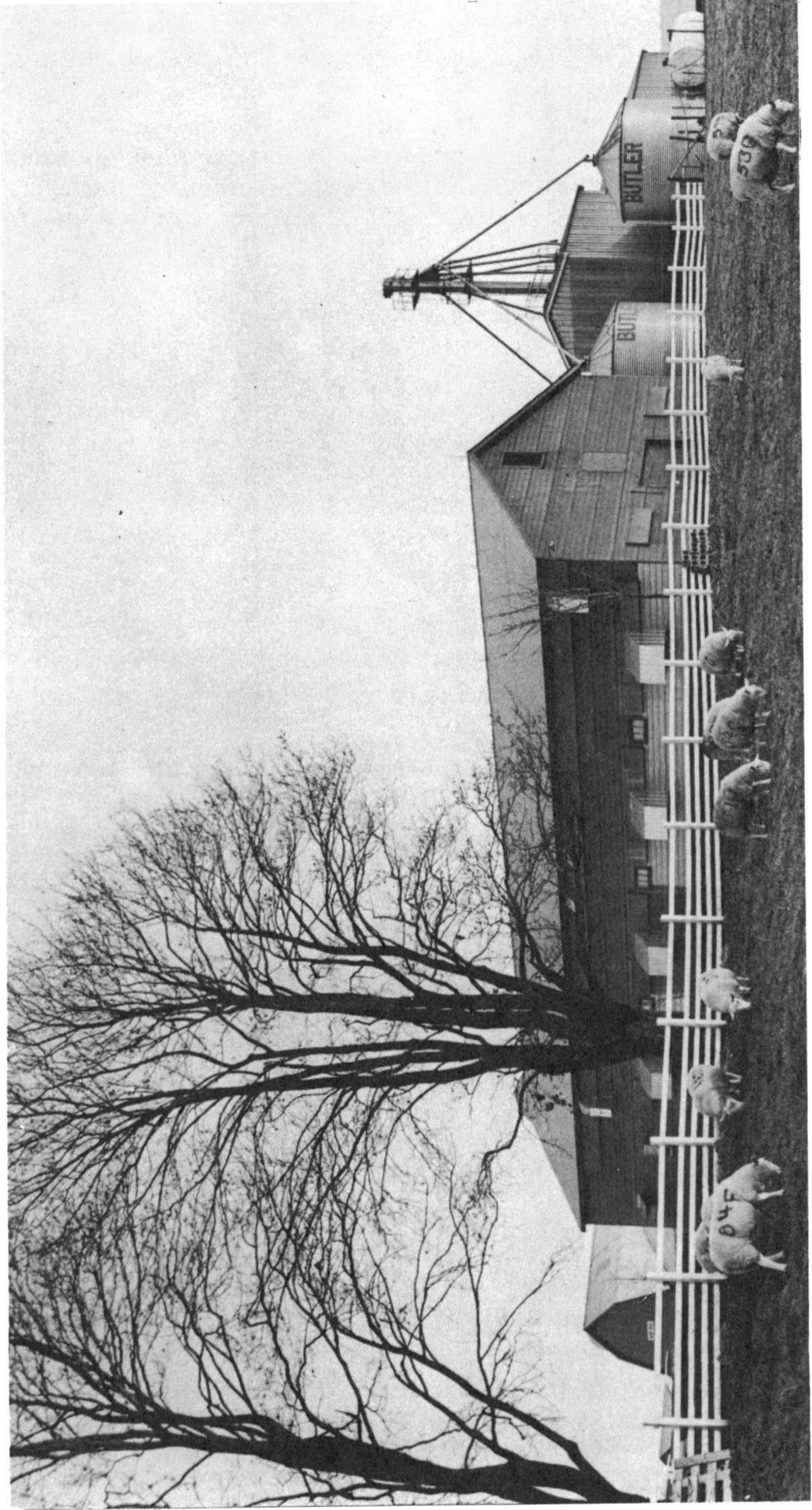
PLANT SCIENCE

PS 200: Greenhouse Crop Production and Floriculture

Instructor: **Prof. Daniels**

Construction and equipment of greenhouses and related structures. Physiological principles involved in the growing and correct timing of vegetable and flower crops will be studied and related to commercially viable plant production. Plant nutrition, propagation and greenhouse management will also be considered.

Winter semester— 3 lecs and 2 labs per week.



VOCATIONAL COURSES

The Nova Scotia Agricultural College offers pre-employment and upgrading courses for several specific farm and farm-related careers. These may be of varying lengths and offered at different times of the year depending upon the occupation topic(s) being studied. All vocational courses lead to vocational certificates.

The following courses were planned for the 1980-81 year. Similar, but not necessarily the same, courses will be planned for the 1981-82 year.

Accounting & Taxation (Farm)
Artificial Insemination
Blueberry Production
Canfarm Record Systems
Cruciferous Crops
Dairy Herd Operation
Draft Horses (Introduction to)
Farm Skills
Farrier (Advanced)
Farrier (Basic)
Floral Design
Floral Design (Introductory)
Fox Production
Goat Husbandry
Horse Care Program
Ironwork (Basic)
Meat Cutting
Mink Production
Pesticides — Crop Protection, Application & Safety
Rabbit Production
Sheep Husbandry (Basic)
Strawberry Production
Swine Farm Management
Swine Herd Operation
Turf Production
Welding (Basic Farm)
Woodlot Management (Farm) & Chain Saw Safety

ENTRANCE REQUIREMENTS

These are specific for each course. In most cases, a candidate for admission must (a) be at least seventeen years of age, (b) present a satisfactory medical report if required, (c) demonstrate interest in the occupation being studied, (d) be

self-employed or have a letter of recommendation from an employer.

COST AND FINANCIAL ASSISTANCE

Room and board at the Nova Scotia Agricultural College is \$52 per week.

The cost for books, student fees, and other similar charges depends upon the length of the course and the topics being covered. Rarely will such costs exceed \$10.

LIVING ALLOWANCES

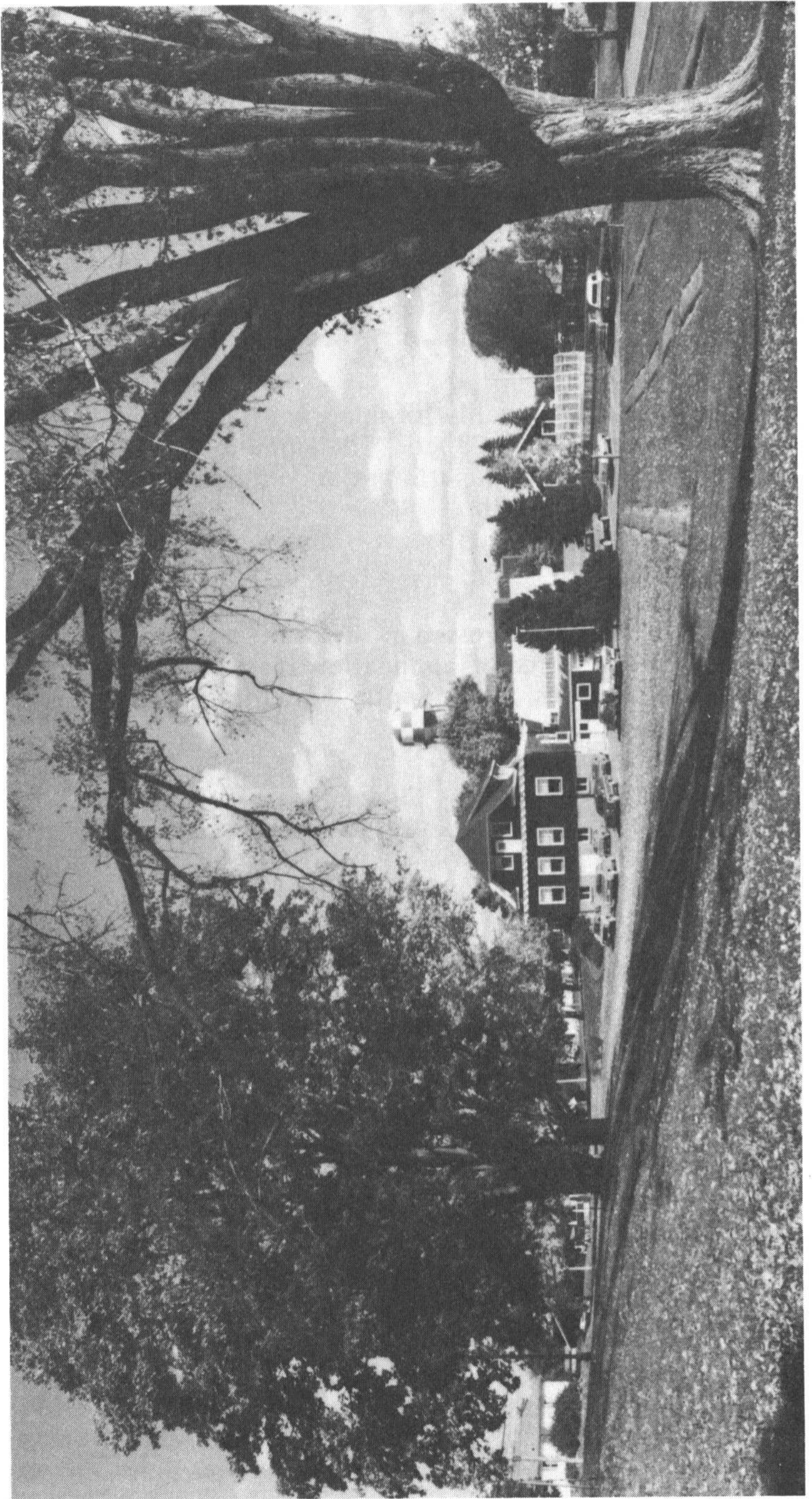
Some adults will qualify for living assistance from Employment and Immigration Canada. The amount of the assistance is determined by the department according to the student's financial responsibilities.

APPLICATIONS

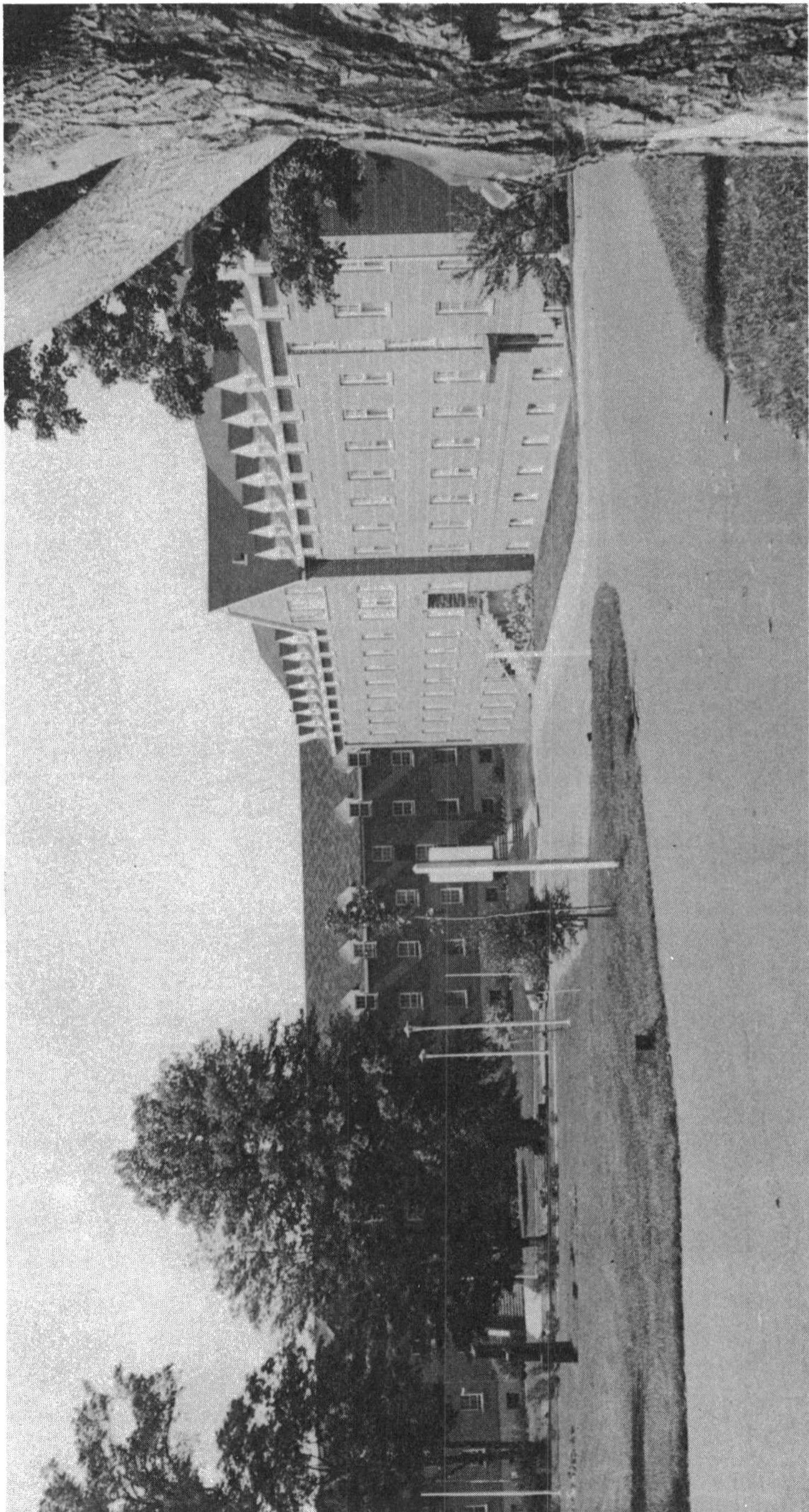
Persons who are interested in any of the vocational courses should write a letter of application to the Co-ordinator of Vocational Courses, Nova Scotia Agricultural College, P.O. Box 550, Truro, N.S. B2N 5E3.

CONTINUING EDUCATION

The NSAC offers evening, summer schools, and block programs from time to time for special interest groups within the agriculture and related industries on a tuition basis. For information on courses offered and costs, write Chairman, Continuing Education, Nova Scotia Agricultural College, P.O. Box 550, Truro, N.S. B2N 5E3.







SCHOLARSHIPS AND PRIZES

ENTRANCE SCHOLARSHIPS

NOVA SCOTIA INSTITUTE OF AGROLOGISTS SCHOLARSHIP

The Nova Scotia Institute of Agrologists has provided a scholarship of \$500 for a resident of Nova Scotia entering the Degree course at the Nova Scotia Agricultural College. In awarding this scholarship, the selection committee will take into consideration academic standing and financial need. Applicants should write the Registrar, Nova Scotia Institute of Agrologists, NSAC, Truro, N.S. for an application form, which will be available by July 1. The application and the applicant's Grade XII certificate should be in the Registrar's office not later than August 15.

CANADA PACKERS INC. SCHOLARSHIP

Canada Packers Inc. offers a scholarship of \$250 to assist a student in entering or continuing in the Degree Course at the Nova Scotia Agricultural College. Candidates for this scholarship should have a good academic record and should have taken an active interest in community agricultural activity.

In making the above award, financial need will be taken into consideration. No application is necessary.

PROVINCIAL SCHOLARSHIPS: NOVA SCOTIA AND NEW BRUNSWICK

The Provinces of Nova Scotia and New Brunswick offer scholarships to their residents entering the Degree courses at the Nova Scotia Agricultural College with good marks. Scholarships are awarded on the basis of the matriculation year. In the case of students with high marks, a scholarship may be offered on the basis of mid-year and Easter marks. No application is necessary.

The Provinces of Nova Scotia and New Brunswick offer scholarships of \$200 to their residents entering one of the Technical Courses at the Nova Scotia Agricultural College with an average of 80% or better. No application is necessary.

PROVINCIAL SCHOLARSHIPS: PRINCE EDWARD ISLAND

The Province of Prince Edward Island offers scholarships to

all residents admitted to the Degree courses at the Nova Scotia Agricultural College. For information and application forms contact:

Rural Development Section—Training
Prince Edward Island Department of Agriculture & Forestry
P.O. Box 2000
Charlottetown, P.E.I. C1A 7N8

I.O.D.E. BURSARIES

I.O.D.E. Bursaries, value \$100 to \$200, are awarded to entering students who show academic ability and financial need. Address applications to the Provincial Education Secretary, Provincial Chapter, I.O.D.E., 2037 Parker St., Halifax, N.S. B3K 4T6. Applications open March 1 and close May 1.

NOVA SCOTIA AGRICULTURAL COLLEGE ALUMNI SCHOLARSHIPS

The Nova Scotia Agricultural College Alumni Association offers two scholarships of \$400 to worthy students entering the first year of the Degree or Technician Course. Academic standing and financial need will be taken into consideration in awarding the scholarships. No application is necessary.

HENRY AUSTIN MEMORIAL 4-H SCHOLARSHIP

In memory of Henry Austin, a devoted friend to everyone and a dedicated leader who faithfully served the County of Cumberland for more than seven years as Agricultural Representative, a memorial fund has been established by his friends to provide an annual scholarship to a deserving 4-H Club member from Cumberland County attending first year in either Technician or Degree Course at the Nova Scotia Agricultural College, or a Home Economics Course, at the college of his or her choice.

This fund will be administered by and the selection of the recipient will be made by the Scholarship Committee of the Cumberland County Federation of Agriculture.

The value of the scholarship at this time is \$100, payable in two parts: \$50 on successful completion of the first term and the balance on completion of the year's course.

Applicants must possess a Grade XI High School Certificate, have completed at least two years in 4-H club work in Cumberland County, and be recommended by the District Federation of Agriculture.

1. Leadership ability and interest in community activities.
2. Scholastic standing and financial need.

Applications must be submitted to the Secretary of the County Federation of Agriculture, not later than August 31.

Application forms may be obtained from the Secretary of the District Federation of Agriculture in the candidate's area, or the Agricultural Office, Amherst.

LEONARD BEST MEMORIAL SCHOLARSHIP

The Nova Scotia 4-H Alumni Association presents a scholarship in memory of Leonard Greenwood Best. This scholarship is awarded annually to the most outstanding 4-H club member in Nova Scotia. The selection is made at the Provincial 4-H Leadership Week in Truro and is based on personality, leadership qualities, contribution to 4-H, and all-round ability. This scholarship, in the amount of \$50, is to be used toward further education in any field, (not applied for).

CANADIAN NATIONAL EXHIBITION SCHOLARSHIP FOR 4-H CLUB MEMBERS

The Canadian National Exhibition will award annually in each province, a scholarship of the value of \$1000 and an all-expense paid trip to the Canadian National Exhibition to a candidate who is currently in, or who has completed, the first year of a degree course in Home Economics, a degree course in Agriculture or a degree course in Veterinary Medicine.

Candidates must be at least 17 years of age, have completed at least two years in 4-H Club work, and have shown qualities of leadership and an interest in community activities.

The successful candidate will receive his or her award at a fitting ceremony at the Canadian National Exhibition in the year in which it is won.

A successful candidate may have five years in which to take up his or her scholarship.

Application forms may be obtained from the Agricultural Representative.

CO-OP ATLANTIC BURSARIES

Co-op Atlantic offers three bursaries of \$200 each to students entering the Technician Course.

The selection will be made on the following basis: (a) the recommendation of a local co-operative or district Federation of Agriculture, (b) need, and (c) potential for community leadership and/or co-operative endeavour.

Applications should be sent to Co-op Atlantic, Box 750, Moncton, N.B., not later than August 15.

THE LORNE S. FISHER MEMORIAL SCHOLARSHIP

In memory of the late Lorne S. Fisher, a leader and a good friend of farm organizations in his community, his county and his province, and a member of the Federation of Agriculture, the Cumberland County Federation of Agriculture has set up a scholarship of \$100, open to a candidate who is a son or daughter of a Federation member and who is enrolled in a Technician Course at this institution. The scholarship will be payable in two parts: \$50 on completion of the first and \$50 on completion of the second year.

Applications must be approved by the District Federation of Agriculture and must be submitted to the Secretary of the Cumberland Federation of Agriculture by August 31. Application forms may be obtained from the Secretary of the District Federation of Agriculture in the candidate's area.

THE BENNY DUIVENVOORDEN MEMORIAL SCHOLARSHIP

The Benny Duivenvoorden Memorial Scholarship of \$500 is offered by the New Brunswick Central Artificial Breeding Co-operative to a New Brunswick 4-H member who enters a recognized college of agriculture.

Applications must be made to the N.B. Central A.B. Co-op, Box 1567, Fredericton, N.B.

The deadline for applications to be at the above address is August 31.

CONTINUATION SCHOLARSHIPS

(For students at the Nova Scotia Agricultural College)

THE NOVA SCOTIA FEDERATION OF AGRICULTURE SCHOLARSHIP

The Nova Scotia Federation of Agriculture offers two scholarships of \$300 each to residents of Nova Scotia. One will be awarded to a student who has completed the work of the first year of the Degree Course and is entering the second year; the other will be awarded to a student who has completed the work of the first year of the Technician Course and is entering the second year of that program.

Financial need and academic standing will be considered in making the award. No application is necessary.

THE DAVID W. BROWN BURSARY

The A.C.A. Co-operative Association Ltd. offers two bursaries of \$500 each, one to a worthy student in the second year

of the Degree program and one to a worthy student in the second year of the Technician program. The bursaries will be awarded on the basis of scholastic achievement, need, interest in farming and the poultry industry in particular.

Applications for the bursaries must be made by May 1. Application forms are available from the Registrar's Office.

GULF CANADA LIMITED SCHOLARSHIP

Gulf Canada Limited offers a scholarship of \$150 to a worthy student in the second year of the Degree Course. In awarding this scholarship, academic standing and financial need will be taken into consideration. No application is necessary.

IRA L. RHODENIZER MEMORIAL SCHOLARSHIP

The Nova Scotia Federation of Agriculture offers, as a memorial to the late Ira L. Rhodenizer, long time friend of organized agriculture and the 4-H movement, a scholarship of \$300 to a student in the Second Year Technician Class or the Second Year Degree Class. The recipient must be a Nova Scotian of high academic standing who has taken an active part in student affairs and has been active in the 4-H movement. The scholarship will be payable after the winner has registered for his second year. No application is necessary.

THE DR. KENNETH COX SCHOLARSHIP

As a tribute to their retiring Principal, the Class of 1964 of the Nova Scotia Agricultural College established a fund of \$2000, the interest on which is to be awarded annually to a worthy student who is entering the final year in agriculture. No application is necessary.

PROVINCIAL SCHOLARSHIPS: NOVA SCOTIA AND NEW BRUNSWICK

The Provinces of Nova Scotia and New Brunswick offer scholarships to their residents registered in the second year of the Degree Course at the Nova Scotia Agricultural College who have attained a high standard on the work of the previous year. No application is necessary.

PROVINCIAL SCHOLARSHIPS: PRINCE EDWARD ISLAND

The Province of Prince Edward Island offers scholarships to all residents registered in the second year of Degree Courses

at the Nova Scotia Agricultural College. For information and application forms contact:

Rural Development Section—Training
Prince Edward Island Department of Agriculture
and Forestry
P.O. Box 2000
Charlottetown, P.E.I.
C1A 7N8

A.W. MacKENZIE SCHOLARSHIP

A scholarship of \$150 is offered by A.W. Mackenzie for a student entering the second year of the Degree Course. The scholarship will be awarded on the basis of scholastic standing, need and participation in 4-H Club activities. No application is required.

ATLANTIC PROVINCES HATCHERY FEDERATION SCHOLARSHIP

The Atlantic Provinces Hatchery Federation offers a scholarship of \$300 to a resident of the Atlantic Provinces who has successfully completed at least one year at the Nova Scotia Agricultural College and who is registered for an additional year. Preference will be given to a student who has an interest in poultry. If there is no candidate with an interest in poultry, preference will be given to a student with an interest in animal science. If there is no candidate with an interest in either poultry or animal science, the scholarship will be awarded to a candidate with interests in other fields.

In awarding the scholarship, financial need will be taken into consideration. Candidates should send a letter giving pertinent details to the Registrar before August 15.

THE FARM FOCUS BURSARY

The Farm Focus newspaper offers a bursary of \$200 to a worthy student entering the second year of the Degree or Technician Course. Academic standing and financial need will be taken into consideration in awarding this bursary. No application is necessary.

CANADIAN FEED INDUSTRY ASSOCIATION (ATLANTIC DIVISION) SCHOLARSHIP

The Atlantic Division of the Canadian Feed Industry Association offers a scholarship of \$400 to a student who

enters the final year of a Technology Course and who intends to pursue a career in farming. Academic standing; excellence in projects and assignments; and overall interest and aptitude in farming and community leadership are to be important considerations in selecting the recipient. No application is necessary.

DONALD E. CLARK MEMORIAL SCHOLARSHIP

In memory of the late Professor and Head of the Agricultural Engineering Department, Donald E. Clark, a scholarship is offered to final year students in the Agricultural Engineering Department and is awarded on the recommendation of the Agricultural Engineering Department Staff.

The amount of the scholarship is determined by the interest from a fund, established by friends and associates in teaching and industry of the late Donald E. Clark. The awarding of the scholarship is based on academic standing, interest and aptitude in the engineering field. No application is necessary.

THE WILFRED CYR MEMORIAL SCHOLARSHIP

The New Brunswick Sheep Breeders Association, in memory of the late Wilfred Cyr, offers two scholarships of \$100 each (one to an Anglophone and one to a Francophone) to students who have completed the first year of a degree or technical course at the Nova Scotia Agricultural College and who enter the second year of the program. Application forms can be obtained from the office of the N.B. Sheep Breeders Association or from the Registrar's Office, NSAC.

THE DR. ROBERT G. RIX FAMILY FARM BURSARY

This bursary of \$200 is offered annually to a student who enters the final year of the Farming Technology course. It is awarded on the recommendation of the Economics and Business Department staff. The selection of the recipient is to be based on: (1) determination and dedication to the objective of operating a family farm, (2) the extent to which the student is hard working and conscientious, and (3) financial need.

The bursary is to be presented at the Fall Assembly. No application is required.

CONTINUATION SCHOLARSHIPS

(For graduates of the Nova Scotia Agricultural College registered at other institutions)

SCHOLARSHIPS AVAILABLE AT MACDONALD COLLEGE

Two Eliza M. Jones Entrance Scholarships, valued at \$700 each, for one year, are awarded to two students who obtain high standing in the graduating year at the Nova Scotia Agricultural College and who subsequently enrol in the Faculty of Agriculture. These scholarships will be made available in September when the students register at Macdonald College.

UNIVERSITY OF MAINE SCHOLARSHIP

Under an agreement between the University of Maine at Orono and the Nova Scotia Agricultural College, up to five graduates each year from the two-year Degree course in Agricultural Science who are residents of the Maritime Provinces and are recommended by the Vice-Principal may enter the penultimate year at Maine and pay the same tuition as the residents of Maine. The tuition is a variable figure, but the arrangement represents a saving of approximately \$1,000 per year.

COBEQUID DOG CLUB SCHOLARSHIP

The Cobequid Dog Club offers a scholarship of \$200 to a student of the Nova Scotia Agricultural College who is admitted to a veterinary college. Preference in the awarding of this scholarship will be given to a resident of Nova Scotia.

The selection of the recipient will be made by the Scholarship Committee, NSAC. No application is necessary.

NEW BRUNSWICK POULTRY COUNCIL SCHOLARSHIP

The New Brunswick Poultry Council offers an annual scholarship of \$400 to a student of the pre-veterinary course at NSAC who is admitted to the Ontario Veterinary College of the University of Guelph or other similar Canadian Veterinary College.

The selection of the recipient of this award shall be made by the Veterinary Selection Committee and approved by the New Brunswick Poultry Council. In the event that more than one student possesses otherwise equal qualifications for an annual award, preference shall be given to a student from New Brunswick.

Applications for this Scholarship shall be tendered to the Chairman of the Veterinary Selection Committee, Nova Scotia Agricultural College, Truro, N.S.

DR. J.G. TAGGART SCHOLARSHIP

The Ontario Agricultural College offers a scholarship of \$250 in memory of Dr. J.G. Taggart, former Deputy Minister of the Canada Department of Agriculture. The Scholarship will be awarded annually to the outstanding graduate of the Nova Scotia Agricultural College who enters the fifth semester of the B.Sc. (Agr.) degree program. Apply to the Asst. Registrar, University of Guelph, before April 1.

CANADA PACKERS INC. SCHOLARSHIP

Canda Packers Inc. offers a scholarship of \$250 to a worthy student who has satisfactorily completed the Degree course at the Nova Scotia Agricultural College and who elects to continue in the Animal Science, Poultry or General Agriculture option at some Canadian Agricultural College. Applications for this scholarship must be made to the Registrar before April 15 of the applicant's final year at the Nova Scotia Agricultural College.

In making the above award, financial need will be taken into consideration.

CO-OP ATLANTIC SCHOLARSHIP

Co-op Atlantic offers a scholarship of \$300 to a graduate of the Nova Scotia Agricultural College from the Maritime Provinces entering the final two years at an approved agricultural college. The scholarship will be awarded on the following basis and may be tenable for two years: (a) scholastic ability, (b) financial need, (c) knowledge and appreciation of co-operatives.

Application forms may be obtained from the Registrar of the Nova Scotia Agricultural College.

Applications must be submitted to the Registrar by April 1.

MEDALS AND 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 his college course. In determining "highest standing", scholarship and leadership in student activities, in the order named, are the deciding factors in making this award.

THE H.J. FRASER MEMORIAL PRIZE FOR ENGLISH

In memory of the late Professor H.J. Fraser, a prize is awarded each autumn, on the recommendation of the English Department, to a second-year student who achieved excellence in a first-year English course at this institution.

THE R.H. STEVENSON MEMORIAL PRIZE FOR MATHEMATICS AND PHYSICS

In memory of the late Professor R.H. Stevenson, a prize is awarded each autumn, on the recommendation of the Mathematics and Physics Department, to a second-year student who achieved excellence in first-year Mathematics and Physics at this institution.

MASTER FEED PRIZES (Division of Maple Leaf Mills Limited)

Maple Leaf Mills Limited provides two prizes of \$25, one for the Feeds and Feeding course and one for the Animal Nutrition course.

NOVA SCOTIA VETERINARY MEDICAL ASSOCIATION PRIZE

The Nova Scotia Veterinary Medical Association provides a prize of \$200 to a deserving student who excels in the Animal Physiology and Animal Health courses offered to second-year Technician students (Animal Science) and who subsequently enrolls in suitable courses of the Technology year.

*KETCHUM MANUFACTURING COMPANY LIMITED
PRIZE*

The Ketchum Manufacturing Company Limited has provided \$2000 in Dominion of Canada Bonds, the interest on which is to be used for an annual prize available to a Nova Scotia Agricultural College graduate registered in the Animal Science option. The prize will be awarded to a worthy student with a satisfactory academic standing. Application for this prize must be made to the Registrar before April 15 of the applicant's last year at the Nova Scotia Agricultural College.

THE LORNE C. CALLBECK PRIZE

A prize of \$50 is awarded each autumn by the late Mr. Lorne C. Callbeck to a second-year degree student who excelled in the Plant Science course in his/her first year.

THE G.G. SMELTZER AWARD

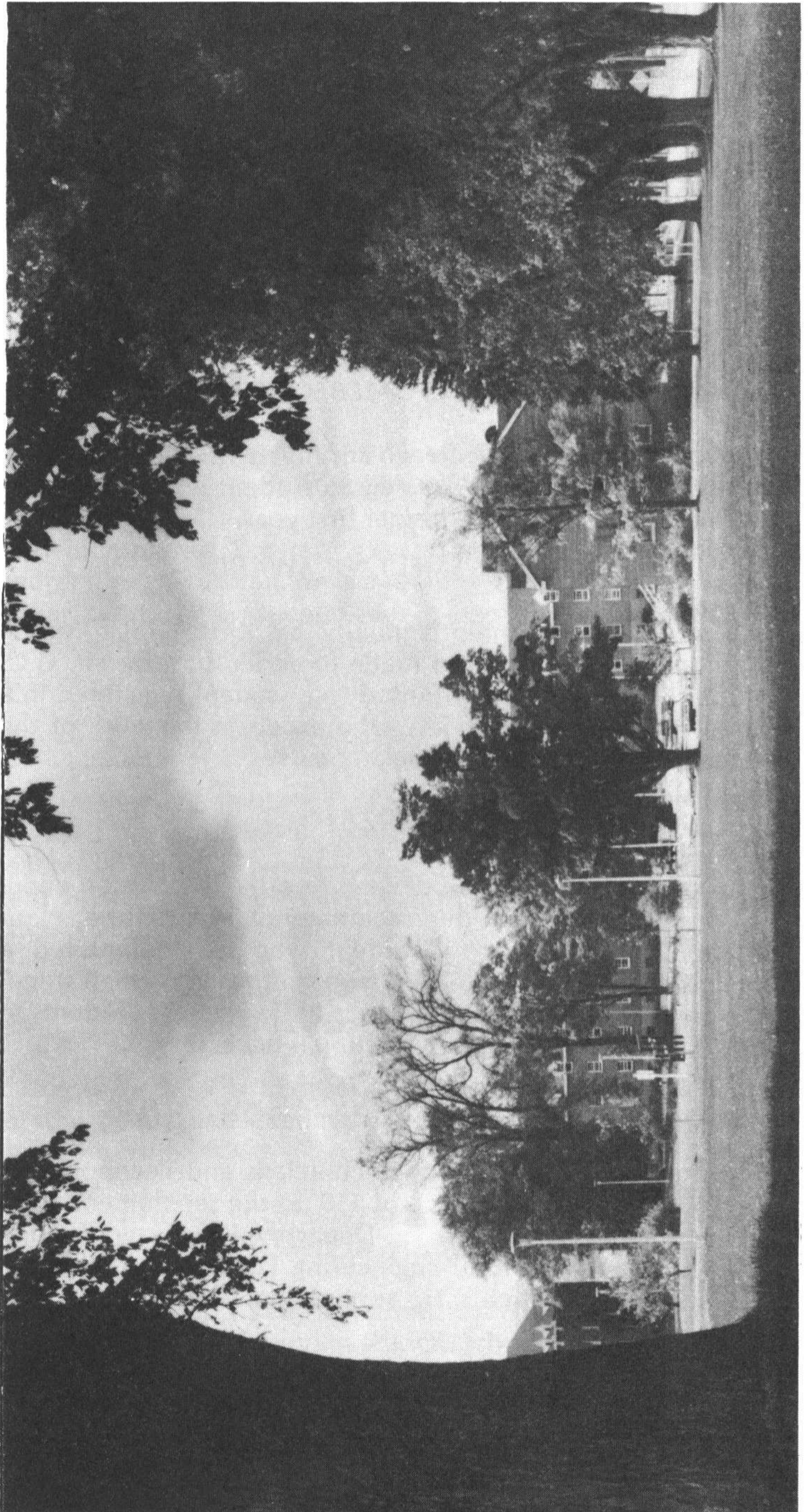
An award is presented annually by King Grain Ltd. in recognition of contributions made to agriculture by Mr. G.G. Smeltzer. This award is presented to a student registered in a second year of study at NSAC who excels in the work of the first year Plant Science Technician course.

K. DEGEUS MEMORIAL PRIZE FOR PLANT SCIENCE

In memory of the late K. deGeus, a prize is awarded annually at graduation on the recommendation of the Plant Science Department to a student who has completed a technical course at N.S.A.C. The award is based on high standing in course work and preference is to be given to students in the horticultural field. No application is necessary.

ENGINEERING TECHNICIAN AWARD

The Society for Engineering Technicians and Technologists of Nova Scotia awards a prize of \$50 on the recommendation of the Agricultural Engineering Department, to a graduating student in the Agricultural Engineering Technician course for outstanding achievements. No application is necessary.



**NOVA SCOTIA AGRICULTURAL COLLEGE
ENROLLMENT 1980-81**

COURSES LEADING TO B.SC. (AGR.) OR PRE-VET

First Year - Class of '82

David Abbass, 2248 Connaught Avenue, Halifax, N.S. B3L 2Z3

Peter Ainslie, 295 Purcell's Cove Road, Halifax, N.S. B3P 1C4

Bernice Allison, P.O. Box 36, C.I. Road, Newcastle, N.B. E1V 3M2

Esben Arnfast, West River Station, Pictou Co., N.S. B0K 1Z0

Linda Atkinson, 283 Uplands Avenue, Newcastle, N.B. E1V 3P3

Steven Backman, 33 Rosedale Avenue, Halifax, N.S. B3N 2J2

Ian Blenkharn, R.R. No. 3, Saltsprings, N.S. B0K 1P0

Margaret Blikslager, Vernon, R.R. No. 1, P.E.I. C0A 2E0

Freeda Bonvie, 191 High Street, New Glasgow, N.S. B2H 2X2

Carol Boyd, Bath, R.R. No. 1, N.B. E0J 1E0

Donna Buckley, Box 1478, Antigonish, N.S. B2G 2L7

Rosaria Campbell, Box 84, R.R. No. 2, Port-au-Port, Nfld. A0N 1T0

Jill Canam, Box 569, Pictou, N.S. B0K 1H0

Mark Carr, 90 Vineland Street, Fredericton, N.B. E3A 1W8

Sheldon Chisholm, P.O. Box 298, Baddeck, N.S. B0E 1B0

Donald Christie, 17 1/2 Lyman Street, Truro, N.S. B2N 4R9

Douglas Crich, 31 Allingham Crescent, St. John, N.B.

F. Alexander Crouse, Box 42, Port Williams, N.S. B0P 1T0

Timothy Delaney, 7 Walters Street, Dartmouth, N.S. B2W 1S9

Ruth DeMone, Clear View Estates, Crossroads, Charlottetown, R.R. No. 1, P.E.I.

Karen Donovan, 116 Poole Street, Woodstock, N.B. E0J 2B0

Diane Dunlop, 14 Archibald Street, Truro, N.S. B2N 4R4

C. Angus Ells, Canning, R.R. No. 5, N.S. B0P 1H0

Kelly Ferguson, 1027 Mollins Drive, Saint John, N.B. E2M 4M1

Miriam Floyd, P.O. Box 1773, Antigonish, N.S. B2G 2M5

Joyce Fredericks, 36 Grant Street, Dartmouth, N.S. B2W 1C3

Lisa Gallant, Souris, R.R. No. 1, P.E.I. C0A 2B0

Lorraine Gaudet, Weymouth, Digby Co., N.S. B0W 3T0

Michael Gazeley, Site 81, Comp. 9, R.R. No. 1, Bedford, N.S. B4A 2W9

Wendy Gibbs, 35 Westwood Drive, Truro, N.S. B2N 3R4

Daniel Gilfoy, R.R. No. 7, William's Point, Antigonish, N.S. B2G 2L4

Katherine Gowan, 169 Union Street, St. Stephen, N.B. E3L 1W2
Pamela Grace, 414 Old Sackville Road, Lower Sackville, N.S. B4C 2J9
Roland Hannem, 205 Musgrave Lane, North Sydney, N.S. B2A 2B9
Donna Hansen, 6 Shaw Avenue, Yarmouth, N.S. B5A 2T9
Ann Hartlin, R.R. No. 4, Middle Musquodoboit, N.S. B9N 1X0
Monica Haydon, 28 Weyburn Road, Dartmouth, N.S. B2W 1R6
Colleen Home, Burt's Corner, N.B. E0H 1B0
Shauneen Hood, Langley Road, Southport, P.E.I.
Stacey Hope, 27 Holiday Drive, Saint John, N.B. E2H 1E3
Dawn Hughes, P.O. Box 77, Miscouche, P.E.I. C0B 1T0
Paul Hughes, R.R. No. 1, Blockhouse, Maitland, N.S. B0J 1E0
Shelley Hustins, 125 Shore Drive, Bedford, N.S. B4A 2E3
Laura-Lee Jewell, Cornwall, P.E.I. C0A 1H0
Chantal Johanns, C.P. 54, R.R. No. 1, Paquetville, N.B. E0B 2B0
Nancy Kenney, R.R. No. 1, Debert, Colchester Co., N.S. B0M 1G0
Kirby Judge, 43 Prince Street, Yarmouth, N.S. B5A 1S4
Donna Kelland, c/o 11 Rodney Street, St. John's, Nfld.
Ann Langille, 56 Elm Street, Springhill, N.S. B0M 1X0
Arnold Laureijs, R.R. No. 3, North Grant, Antigonish Co., N.S. B2G 2L1
John Lohr, R.R. No. 1, Canning, N.S. B0P 1H0
Alan Manning, 171 Queen Elizabeth Drive, Charlottetown, P.E.I. C1A 3B1
Louise Mason, Ross Terrace, R.R. No. 8, Fredericton, N.B. E3B 5W5
Tami Matheson, R.R. No. 1, Pomeroy Ridge, St. Stephen, N.B. E3L 2X8
Ricky Milton, R.R. No. 3, Cornwall, P.E.I. C0A 1H0
Stephen Morris, 28 Forest Road, Kennebecasis Park, St. John, N.B. E2H 1B5
Susannah Morton, R.R. No. 2, Rexton, N.B. E0A 2L0
Randall Murphy, R.R. No. 1, Scotch Village, N.S. B0N 2G0
Kevin McCarville, R.R. No. 1, Borden, P.E.I. C0B 1X0
G. Reid MacDiarmid, 614 Montgomery Avenue, Riverview, N.B. E1B 2A3
Catherine MacDonald, P.O. Box 1231, Antigonish, N.S. B0H 1B0
Gerald MacDonald, R.R. No. 1, Antigonish, N.S. B2G 2K8
Marion MacDonald, 42 Normandy Avenue, Truro, N.S. B2N 3J7

Mary MacDonald, Souris Line Road, Box 11, R.R. No. 3,
P.E.I. C0A 2B0
Ronald MacDonald, P.O. Box 40, Bras d'Or, N.S. B0C 1B0
Allan MacDougall, 20 Queen Square, Saint John, N.B. E2L
1R7
Kimberley McGinnis, 190 Desbrisay Drive, Bridgewater, N.S.
B4V 3E5
Charles McIntosh, R.R. No. 1, Bath, N.B. E0J 1E0
Kevin McIsaac, Mermaid, R.R. No. 5, P.E.I. C1A 7J8
Kathy MacKeigan, 83 Rigby Road, Sydney, N.S. B1P 4T5
Tracey MacKenzie, R.R. No. 1, Ripples, N.B. E0E 1M0
Allison MacKinnon, Ellerslie, P.E.I. C0B 1J0
Scott MacLeod, 96 Main Street, Springhill, N.S. B0M 1X0
Troye McPherson, 816 Prince Street, Sydney, N.S. B1P 5B7
Daniel Nolan, 647 Willow Street, Truro, N.S. B2N 5B6
Leonard North, P.O. Box 261, Canning, N.S. B0P 1H0
John O'Halloran, R.R. No. 1, Upper Woodstock, N.B. E0J 1Z0
Iain Orr, R.R. No. 1, Port Howe, N.S. B0K 1K0
Elizabeth Pace, P.O. Box 299, Shubenacadie, N.S. B0N 2H0
Dana Patterson, R.R. No. 1, Wolfville, N.S. B0P 1X0
Donald Pickard, R.R. No. 3, Bath, N.B. E0J 1E0
Melinda Poile, R.R. No. 2, Westfield, Kings Co., N.B. E0G 3J0
Charles Porrier, Jr., R.D. No. 1, Granville, New York, U.S.A.
12832
Scott Putnam, R.R. No. 1, Debert, N.S. B0M 1G0
John Riordon, Box 1380, R.R. No. 1, Bathurst, N.B. E2A 3Y5
Brian Robinson, 44 Birch Street, Halifax, N.S. B3N 2V1
Suzanne Rowan, 14 Skyvue Terrace, Dartmouth, N.S. B2W
3Z3
Heather Rushton, R.R. No. 2, Annapolis Royal, N.S. B0S 1A0
Brenda Ryan, Box 138, R.R. No. 1, Marine Drive, Torbay,
Nfld.
Robert Salsman, 49 Pictou Road, Truro, N.S. B2N 2R9
Susan Scales, 16 Crestwood Drive, Charlottetown, P.E.I.
CIA 3H3
Shari Schurman, Summerside, R.R. No. 3, North Bedeque,
P.E.I. C1N 4J9
Barry Seaman, 197 Reade Street, Moncton, N.B. E1C 6S7
Carol Sinnis, R.R. No. 1, Stellarton, N.S. B0K 1S0
J. Mark Sinnis, 109 Montgomery Avenue, Riverview, N.B.
E1B 1Z1
Lisa Sioen, Belfast Post Office, P.E.I. C0A 1A0
Janice Slater, R.R. No. 5, Debec, N.B. E0J 1J0
Victoria Sovie, P.O. Box 625, Chester, N.S. B0J 1J0
Cathy Sparks, 7 Patterson Street, Dartmouth, N.S. B2W 2V9
Lionel Stevens, 1841 Walnut Street, Halifax, N.S. B3H 3S8
Ann Thorne, Sussex Corner, N.B. E0E 1R0

Karen VanBuskirk, 29 Clearview Crescent, Dartmouth, N.S.
B3A 2M9
Scott Wile, Petite Riviere, Lunenburg Co., N.S. B0J 2P0
Juliette Williams, 68 Mercer Street, Sydney, N.S. B1N 2X9
Steven Wilson, Maccan, N.S. B0L 1B0
Margarete Zillig, R.R. No. 1, Scotch Village, N.S. B0N 2G0

Second Year - Class of '81

John Adams, 34 Mt. Pleasant Boulevard, Truro, N.S.
B2N 3N7
Robert Ansems, R.R. No. 2, Centreville, N.S. B0P 1J0
Allen Bent, R.R. No. 3, Lawrencetown, N.S. B0S 1M0
Lynn Chiasson, 10 Chapel Drive, Glace Bay, N.S. B1A 4C4
Melanie Chiasson, 30 Willow Street, Amherst, N.S. B4H 3W1
E. John Clark, R.R. No. 3, Saint George, N.B. E0G 2Y0
Heath Coles, Winsloe, R.R. No. 2, P.E.I. C0A 2H0
Edward Doyle, R.R. No. 4, Mount Stewart, P.E.I. C0A 1T0
Pauline Duivenvoorden, Armstrong Brook, N.B. E0B 1B0
Carol Fraser, 176 Woodstock Road, Fredericton, N.B.
E3B 2H5
Lawrence Jones, 73 Renfrew Street, Petitcodiac, N.B.
E0A 2H0
Bonita Kelly, 538 Elmwood Drive, Moncton, N.B. E1A 2X3
David Kelly, R.R. No. 3, Mount Stewart, P.E.I. C0A 1T0
Shawn Kennedy, 3531 Gottingen Street, Halifax, N.S.
B3K 3E7
G. Andrew Kielly, West Covehead, R.R. No. 1, York, P.E.I.
C0A 1P0
Lorraine Lawrence, Mouth of Keswick, N.B. E0H 1N0
Shelley-Lynne Manning, R.R. No. 5, Truro, N.S. B2N 5B3
Clifford Meek, Canning, N.S. B0P 1H0
Colleen Mitchell, 4 Williams Lake Road, Halifax, N.S.
B3P 1S5
Steven Myette, Box 20, R.R. No. 1, Afton, N.S. B0H 1A0
Marion MacAulay, R.R. No. 2, Souris, P.E.I. C0A 2B0
M. Beverly MacDougall, R.R. No. 4, Lakevale, Antigonish,
N.S. B2G 2L2
Cynthia MacKenzie, 129 Traynor Street, Riverview, N.B.
E1B 3B1
David MacKenzie, Millview, P.E.I. C0A 2E0
Mary MacKinnon, 1313 College Street, Antigonish, N.S.
B2G 1X9
Nancy MacLean, 38 Johnston Avenue, Truro, N.S. B2N 4M4
Alexander MacLeod, R.R. No. 2, Scotsburn, N.S. B0K 1R0
Stephen MacMackin, 40 Seely Street, Saint John, N.B.
E2K 4B2

Michelle Nicholson, 14 Nightingale Drive, Halifax, N.S.
 B3M 1V3
Velma Noble, Wilmot, Annapolis County, N.S. B0P 1W0
Jennifer Pepler, 383 Geneva Crescent, Montreal, P.Q.
 H3R 2B1
Bruce Pettipas, R.R. No. 2, Havre Boucher, N.S. B0H 1P0
Mark Pitman, Box 5430, R.R. No. 4, Yarmouth, N.S. B5A 4A8
Elizabeth Prentice, 480 Portland Street, Dartmouth, N.S.
 B2Y 1L4
R. Craig Quinn, 23 Kingston Crescent, Dartmouth, N.S.
 B3A 2L9
Merridy Robinson, Stewiacke, N.S. B0N 2J0
Ursula Ryle, R.R. No. 2, Truro, N.S. B2N 5B1
C. Anne Simmonds, 9 Crestwood Drive, Charlottetown, P.E.I.
 C1A 3H2
N. Heather Spavold, P.O. Box 290, Enfield, N.S. B0N 1N0
S. Mary Spinelli, 131 Belle Vista Drive, Dartmouth, N.S.
 B2W 2X6
Janice Tait, Penobsquis, N.B. E0E 1L0
Everett Taylor, Doaktown, N.B. E0C 1G0
Kelly Terry, R.R. No. 6, Truro, N.S. B2N 5B4
Julie Thomas, Upper Rawdon, Hants Co., N.S. B0N 2N0
Caryn Thompson, R.R. No. 3, Red Head, Saint John, N.B.
 E2L 4V3
Marlene Thompson, Apt. 105, 60 Chadwick Place, Halifax,
 N.S.
Roger Van Horne, R.R. No. 1, Wilmot, N.S. B0P 1W0
Donna Wilson, R.R. No. 1, Stanley, N.B. E0H 1T0
Linda Wood, 2 Kennedy Road, R.R. No. 1, Charlottetown,
 P.E.I. C1A 7J6
F. Jonathan Wort, P.O. Box 112, Waverley, N.S. B0N 2S0

Course Leading to B.E. (Agr.)

First Year—Class of '82

Howard Allison, R.R. No. 1, Upper Kennetcook, Hants Co.,
 N.S. B0N 2L0
Walter Allison, Florenceville, N.B. E0J 1K0
Kevin Brown, R.R. No. 2, Glassville, N.B. E0J 1L0
Debra Cochrane, 3 Scenic Drive, Truro, N.S. B2N 5N9
Gerald Foster, P.O. Box 1384, Greenwood, N.S. B0P 1N0
Pierre Gasser, Pike River, Missisquoi Co., Que. J0J 1P0
Behrooz Hashemian, North Afarian No. 194, Mashad, Iran
Shahryar Nosratieh, Madjidieh Street, Bashgah Ave., Tehran,
 Iran
Gregory Pace, 6544 Liverpool Street, Halifax, N.S. B3L 1Y5

Cynthia Pryor, P.O. Box 83, Centreville, N.B. E0J 1H0
Reza Torabi, Apt. 901, 530 Laurier W., Ottawa, Ontario
Michael Tulkens, R.R. No. 1, Heatherton, N.S. B0H 1R0

Second Year—Class of '81

Robert Berkvens, R.R. No. 2, Heatherton, N.S. B0H 1R0
Paul Brenton, 362 Brunswick Street, Truro, N.S. B2N 2J7
Carl Esau, R.R. No. 1, Debert, N.S. B0M 1G0
Richard Huggard, 59 Shannon Drive, Truro, N.S. B2N 3V7
Philip Lowery, 113 Torwood Court, Riverview, N.B. E1B 2K4
Darrell McIsaac, R.R. No.1, Stickney, N.B. E0J 1X0

TECHNICIAN DIPLOMA

First Year—Class of '82

Douglas Anderson, R.R. No. 3, Baddeck, Victoria Co., N.S.
B0E 1B0
Ronnie Arbing, R.R. No. 3, O'Leary, P.E.I.
Ella Austin, R.R. No. 2, Whycocomagh, N.S. B0E 3M0
Arsene Babineau, P.O. Box 241, Acadieville, N.B. E0A 2T0
Gregory Banks, Sheffield, R.R. No. 2, Fredericton, N.B.
E3B 4X3
Stephen Barrett, R.R. No. 1, Bridgetown, N.S. B0S 1C0
Stephen Becker, R.R. No. 1, Port Elgin, N.B. E0A 2K0
Randall Bishop, Kingston, N.S.
Bernice Bissett, Bissett Rd., R.R. No. 1, Dartmouth, N.S.
B2W 3X7
Veronica Broussard, R.R. No. 1, Afton, Antigonish Co., N.S.
B0H 1A0
Andrew Brown, 409 Cleveland Avenue, Riverview, N.B.
E1B 1Y3
Christopher Brown, R.R. No. 2, Bridgewater, N.S. B4V 2W1
Paul Brown, R.R. No. 1, Richmond, P.E.I. C0B 1Y0
Brian Buchanan, R.R. No. 4, Sussex, N.B. E0E 1P0
Steven Buckler, 182 Willow St., Truro, N.S. B2N 5A2
Abraham Buttimer, Box 595, R.R. No. 1, Bathurst, N.B.
E2A 3Y5
David Cameron, R.R. No. 1, Crapaud, P.E.I. C0A 1J0
Grant Campbell, 41 Park Street, Truro, N.S. B2N 3J5
Glenda Carver, R.R. No. 1, Montague, P.E.I. C0A 1R0
George Chisholm, R.R. No. 1, Bear River, N.S. B0S 1B0
Leo Chisholm, Shucksherri Farm, Harbour Centre,
Antigonish, N.S. B2G 2L2
Donald Comeau, Little Brook, Digby Co., N.S. B0W 1Z0

Michael Comeau, P.O. Box 158, Meteghan, Digby Co., N.S.
 B0W 2J0
Paul Cooke, R.R. No. 2, Pine Grove Rd., Bridgewater, N.S.
 B4V 2W1
Virginia Cooke, 44 Maple Ave., Sherwood, P.E.I. C1A 6E3
Douglas Cox, R.R. No. 1, Scotch Village, N.S. B0N 2G0
Peter Cromwell, R.R. No. 2, Douglastown, N.B. E0C 1H0
Pamela Crossman, 16 Woodward Crescent, Halifax, N.S.
 B3M 1J7
Sharas Dauda, P.O. Box 16, Mubi, Gongola State, Nigeria
Ronald Davis, 118 Cordova Street, Amherst, N.S. B4H 2L1
Carol Dixon, R.R. No. 1, Walton, Hants Co., N.S. B0N 2R0
Carl Duivenvoorden, Armstrong Brook, N.B. E0B 1B0
Joan Dunphy, 36 Hillcrest Street, Antigonish, N.S. B2G 1Z3
John Ferguson, P.O. Box 33, Norton, Kings Co., N.B.
 E0G 2N0
Michael Fitzgerald, R.R. No. 1, Lantz, N.S. B0N 1R0
Glenn Foster, P.O. Box 1384, Greenwood, N.S. B0P 1N0
David Fullerton, Great Village, N.S. B0M 1L0
P. Claudette Gallant, P.O. Box 55, Covehead, Little York,
 P.E.I. C0A 1P0
Moira Giffin, 174 Colonial Heights, Fredericton, N.B.
 E3B 5M1
Robert Glenwright, 47 Churchill Street, Truro, N.S. B2N 1M9
Norman Gray, P.O. Box 105, Centreville, N.B. E0J 1H0
Michael Green, P.O. Box 377, Sackville, N.B. E0A 3C0
Michael Hemphill, R.R. No. 6, Debec, N.B. E0J 1J0
D. Mitchell Henry, R.R. No. 2, Plaster Rock, N.B. E0J 1W0
Philip Hicks, R.R. No. 4, Centreville, N.B. E0J 1H0
Mary Jenkins, R.R. No. 1, Centre Nappan, N.B. E1N 3A1
Lennox Jeroham, P.O. Box 16, Gongola, Nigeria
Graeme Jones, P.O. Box 2811, Dartmouth East Postal
 Station, Dartmouth, N.S. B2W 4R4
Hans Jost, Malagash, Cumberland Co., N.S. B0K 1E0
Colin Kent, R.R. No. 1, Truro, N.S. B2N 5A9
Gordon Lewis, Little York, P.E.I. C0A 1P0
Alison Lutes, R.R. No. 8, Moncton, N.B. E1C 8K2
Larry Lutz, R.R. No. 1, Berwick, N.S. B0P 1E0
Ronald Matters, North Wiltshire, P.E.I. C0A 1Y0
Karen Meek, Canning, Kings Co., N.S. B0P 1H0
Kenneth Melanson, Box 205, R.R. No. 7, Pomquet,
 Antigonish Co., N.S. B2G 2L4
M. Glenn Miller, 3 Third Street, Mount Pearl, Nfld. A1N 2A4
Stephen Mingo, 212 Mitchell Street, New Glasgow, N.S.
 B2H 1H6
Terry Monture, 22 Dahlia Place, Truro, N.S. B2N 5X2
Richard Moore, P.O. Box 129, Gagetown, N.B. E0G 1V0

Pasum Mujah, P.O. Box 3, Numan, Gongola State, Nigeria
Sharon Murray, R.R. No. 1, Scoudouc, N.B. E0A 1N0
Mohamed Mustapha, c/o Alhaji M. Mustapha, Agric. &
 Natural Resources Div., Kaduna, Nigeria
John McCabe, R.R. No. 3, Westville, Pictou Co., N.S.
 B0K 2A0
Lawrence McGuigan, R.R. No 1, Millville, N.B. E0H 1M0
M. Andrew McKinstry, P.O. Box 7, Middle Musquodoboit,
 N.S. B0N 1X0
Malcolm McLean, R.R. No. 1, Eureka, Pictou Co., N.S.
 B0K 1B0
Daryl MacTavish, 879 King George Highway, Newcastle,
 N.B. E1V 1P9
John Nichol, R.R. No. 3, Pictou, N.S. B0K 1H0
Gary Noseworthy, 132 Main Avenue, Halifax, N.S. B3M 1B1
Daniel Orr, R.R. No. 6, St. Stephen, N.B. E3L 2Y3
Stephen Oulton, R.R. No. 3, Sackville, N.B. E0A 3C0
Valdis Petersen, Newport, R.R. No. 1, Hants Co., N.S.
 B0N 2A0
Randolph Pettipas, R.R. No. 2, Havre Boucher, Antigonish
 Co., N.S. B0H 1P0
Sharon Rand, Port Williams, Kings Co., N.S. B0P 1T0
Stephen Reaman, R.R. No. 3, Truro, N.S. B2N 5B2
Jean-Louis Richard, Box 164, R.R. No. 4, Acadieville, N.B.
 E0A 2T0
Wanda Robar, R.R. No. 1, Greenfield, Queens Co., N.S.
 B0T 1E0
Rejean Robichaud, R.R. No. 1, Rogersville, N.B. E0A 2T0
Sherry Rogers, R.R. No. 2, Centreville, Kings Co., N.S.
 B0P 1J0
Catherine Romans, 23 Howland Drive, Lower Sackville, N.S.
 B4C 1S5
M.N. Raye Sharpe, 59 Mount Bernard Ave., Corner Brook,
 Nfld. A2H 5G1
Joshua Sini, c/o Allahaji Abbo Jimeta, M.O.W., Yola,
 Gongola State, Nigeria
Kevin Spicer, R.R. No. 2, Berwick, N.S. B0P 1E0
Peter Stavert, R.R. No. 1, Freetown, P.E.I. C0B 1L0
Helen Steele, R.R. No. 3, Canning, N.S. B0P 1H0
Allan Turner, R.R. No. 1, Port Williams, N.S. B0P 1T0
Peter Van Diepen, R.R. No. 2, Morell, P.E.I., C0A 1S0
Joseph Van Oirschot, R.R. No. 2, Antigonish, N.S. B2G 2K9
John Vermeer, R.R. No. 2, Pleasant Valley, Antigonish, N.S.
 B2G 2K9
Brian Watts, P.O. Box 4, York Post Office, York, P.E.I.
 C0A 1P0

Jennifer Welsh, Brackley Beach, Winsloe, R.R. No. 1, P.E.I.
 C0A 2H0
Michael Weston, Centreville, N.B. E0J 1H0
Danny White, R.R. No. 1, Maitland, Hants Co., N.S. B0N 1T0
Bruce Withrow, R.R. No. 1, Upper Rawdon, Hants Co., N.S.
 B0N 2N0
Pamela Woodman, R.R. No. 2, Falmouth, N.S. B0P 1L0
Deborah Wynberg, R.R. No. 9, Moncton, N.B. E1C 8K3
Garba Yaro, P.O. Box 1170, Kano State, Nigeria
Marian Zinck, General Delivery, Chester, N.S. B0J 1J0

Second Year—Class of '81

Donatus Ameh, c/o S. Ameh, Obu Branch, P.A. Benue State,
 Nigeria
David Anderson, R.R. No. 3, Wolfville, N.S. B0P 1X0
Robert Atkinson, 124 Wilson Street, Woodstock, N.B. E0J
 2B0
Andrew Audu, Ahmadu Bello University, Institute of Admin.,
 Zaria, Nigeria
Stephen Avery, R.R. No. 1, Kingston, N.S. B0P 1R0
Yvon Babineau, R.R. No. 4, C.P. 171, Acadieville, N.B.
 E0A 2T0
David Baldwin, Cambridge Station, R.R. No. 2, N.S. B0P 1G0
Beverly Barkhouse, Apt. 8, 88 Willow Street, Truro, N.S.
Keith Barnes, R.R. No. 1, Bass River, N.B. E0A 1C0
Stanley Barter, R.R. No. 5, Lochaber, Antigonish Co., N.S.
 B2G 2L3
John Berry, Box 24, R.R. No. 3, Fredericton, N.B. E3B 4X4
Gregory Blois, R.R. No. 1, Gore, Kennetcook, Hants Co., N.S.
 B2W 3X7
Peter Boswall, R.R. No. 3, Marshfield, P.E.I. C1A 7J7
Daniel Boudreau, Box 15, Monastery, N.S. B0H 1W0
Robert Bourgeois, R.R. No. 1, St. Joseph, West. Co., N.B.
 E0A 2Y0
Daniel Bruce, R.R. No. 3, Bridgetown, N.S. B0S 1C0
Murray Bulger, Box 125, Cornwallis, N.S. B0S 1H0
James Cairns, Lower Freetown, P.E.I. C0B 1L0
Malcolm Cairns, Lower Freetown, P.E.I. C0B 1L0
Michael Carmichael, Albany, P.E.I. C0B 1A0
Gary Carson, Havelock, N.B. E0A 1W0
Dana Chase, R.R. No. 1, Chipman, N.B. E0E 1C0
Kevin Clancey, 26 Booth Street, Halifax, N.S. B2X 1N9
David Cole, R.R. No. 3, Middle Musquodoboit, N.S. B0N 1K0
Donald Connell, R.R. No. 1, Canning, N.S. B0P 1H0
Edward Davidson, R.R. No. 1, Wolfville, N.S. B0P 1X0
Ronnald DeGroot, Eel River Crossing, N.B. E0B 1P0

Ronald Densmore, East Noel, Hants Co., N.S. B0N 1J0
Anna d'Entremont, Lower West Pubnico, Yarmouth Co., N.S.
 B0W 2C0
John Dorn, R.R. No. 2, Oxford, N.S. B0M 1P0
Stephen Duizer, R.R. No. 4, Amherst, N.S. B4H 3Y2
Gordon Elliott, R.R. No. 2, Anagance, Kings Co., N.B.
 E0E 1A0
Abraham Embu, c/o Mr. William E. Embu, Plateau Pub. Co.,
 Ltd., P.M.B. 2112, Jos, Nigeria
Noel Enman, Vernon River, P.E.I. C0A 2E0
Patrick Eyking, R.R. No. 1, Bras d'Or, N.S. B0C 1B0
Blair Fraser, R.R. No. 3, Canning, Kings Co., N.S. B0P 1H0
Kerry Garland, R.R. No. 2, Waterville, N.S. B0P 1V0
John Gerrits, R.R. No. 2, Centreville, N.S. B0P 1J0
Heather Gilbert, 69 Sims Avenue, Victoria, B.C. V7Z 1J9
Peter Gourley, 9 Chestnut Place, Kentville, N.S.
Michael Griffiths, 16 Hill Street, Amherst, N.S. B4H 2N3
Margaret Harbers, R.R. No. 3, Wolfville, N.S. B0P 1X0
Douglas Howatt, R.R. No. 4, North Wiltshire, P.E.I. C0A 1Y0
Leigh Hunt, 14 Guysborough Avenue, Dartmouth, N.S.
 B2W 1S5
Abdulrahaman Ibrahim, C17 Gambari Road, Ilorin, Kwara
 State, Nigeria
Godspeace Ihunna, 192 Clifford Road, Aba, Imo State,
 Nigeria
Obinnaya Ikonte, Amanicwo Uzuafoli, Box 40, Uzuakoli,
 Imo State, Nigeria
Stella Johnson, P.O. Box 367, Torbay, Nfld. A0A 3Z0
Keith Kickham, Mount Herbert, R.R. No. 5, Charlottetown,
 P.E.I. CIA 7J8
Modu Kolo, 9 Ali Oikwa Street, Gamboru Ward, Maiduguri,
 Borno State, Nigeria
Paul Langelaan, R.R. No. 2, Salisbury, N.B. E0A 3E0
Scott Lewis, R.R. No. 1, York, P.E.I. C0A 1P0
Sharon Lockwood, 51 Lockhart Avenue, Truro, N.S. B2N 5R7
H. John Lundrigan, Humber Village, Box 2, Site 12, R.R. No.
 1, Corner Brook, Nfld.
Larry Mailman, R.R. No. 4, Shubenacadie, N.S. B0N 2H0
Umar Mohammed, c/o Alhaji Mohammodu B. Kutigi,
 Ministry of Nat. Res., Minna, Niger State, Nigeria
Cynthia Murphy, R.R. No. 2, Centreville, N.S. B0P 1J0
Robert E. Murray, R.R. No. 1, Belmont, N.S. B0M 1C0
Robert K. Murray, 9 Westwood Dr., Dartmouth, N.S. B2X 1Y3
Yvonne MacDonald, Doctor's Brook, R.R. No. 3, Antigonish,
 N.S. B2G 2L1

Hugh MacDougall, 48 Greenwold, Antigonish, N.S. B2G 2H8
Cathy McEachern, 85 Cottonwood Avenue, Charlottetown,
P.E.I. C1A 7J9

Daniel MacEwen, R.R. No. 1, Bonshaw, P.E.I. C0A 1C0

Philip MacLean, 148 Buckingham Drive, Sydney, N.S.
B1S 1X3

Donald MacMillan, R.R. No. 2, Mount Stewart, P.E.I.
C0A 1T0

Daniel Nichol, R.R. No. 3, Pictou, N.S. B0K 1H0

Donald Nicholson, 814 George Street, Sydney, N.S. B1P 1L6

Stephen Nielsen, R.R. No. 2, Stewiacke, N.S. B0N 2J0

Cynthia Northup, 1251 King Street, Windsor, N.S. B0N 1H0

Adebayo Ogunkelu, SW8/1240 Imalefalafia Street, Oke, Ado
Ibadan. Oyo State, Nigeria

Patrick Ogunnubi, P.O. Box 19, Ibilio, Bendel State, Nigeria

J. Marcel Ouellette, R.R. No. 2, Grand Falls, N.B. E0J 1M0

Timothy Pearson, Canning, Kings Co., N.S. B0P 1H0

Gregory Pelkey, Aroostook, N.B. E0J 1B0

Rebecca Potter, R.R. No. 2, Centreville, N.S. B0P 1J0

Roger Pryor, Apt. No. 2, 48 Queen Street, Truro, N.S.

Kimberley Robertson, P.O. Box 874, Shelburne, N.S.
B0T 1W0

Daniel Saunders, R.R. No. 1, Truro, N.S. B2N 5A9

Wendy Smith, R.R. No. 2, Freetown, P.E.I. C0B 1L0

Susan Stewart, R.R. No. 4, St. George, N.B. E0G 2Y0

John Sullivan, 559 Albert Street, Fredericton, N.B. E3B 2C1

E. Grant Terry, R.R. No. 6, Truro, N.S. B2N 5B4

Yakub Tumbau, c/o C.I.M. Zaboló Via Jos, Plateau State,
Nigeria

Patrick Ube, P.O. Box 23, Edem Ekpat, Etinan, Cross River
State, Nigeria

Margaret Van Dyk, R.R. No. 1, Spruce Grove, Alberta

Blair Van Omme, R.R. No. 1, Mount Mellick, Charlottetown,
P.E.I. C1A 7J6

Andrew Van Wiechen, R.R. No. 1, Montague, P.E.I. C0A 1R0

Barbara Wallace, P.O. Box 96, Milford Station, N.S. B0N 1Y0

N. Waldo Walsh, R.R. No. 1, Berwick, N.S. B0P 1E0

R. Kevin Whitman, R.R. No. 4, Bridgewater, N.S. B0S 1C0

Solomon Williams, Radio Kwarq Broadcasting House, Ilorin,
Nigeria

Anne Winkelman, P.O. Box 95, Bridgewater, N.S. B4V 2W8

William Withrow, R.R. No. 1, Upper Rawdon, N.S. B0N 2N0

Joanne Wright, 547 Pictou Road, Truro, N.S. B2N 2V2

Nancy Zwicker, R.R. No. 4, Bridgewater, N.S. B4V 2W3

TECHNOLOGY DIPLOMA

First Year—Class of '82

Mary Burzynski, 166 North Street, Moncton, N.B. E1C 5Y1

Helen Connolly, Havre Boucher, Antigonish Co., N.S.

B0H 1P0

Nelson Christie, Temperance Vale, York Co., N.B. E0H 1W0

Allan Cumiskey, R.R. No. 5, Charlottetown, P.E.I. C1A 7J8

Catherine Deveau, 4 Greenvale Crescent, Dartmouth, N.S.

B2W 3X7

Gregory Fergus, 45 Grandview Avenue, Trenton, N.S.

B0K 1X0

Joyce Ferguson, Box 33, Norton, N.B. E0G 2N0

Anne Fraser, 34 Duncan Avenue, Kentville, N.S. B4N 1N5

Janice Giles, 22 Hingley Avenue, Truro, N.S. B2N 3B8

Wilda Gosselin, 56 Denoon Street, Pictou, N.S. B0K 1H0

Eric Griffin, 145 Melrose Avenue, Halifax, N.S. B3N 2E8

Linda Hamilton, R.R. No. 5, Truro, N.S. B2N 5B3

Ralph Jardine, 24 Ingraham Street, North Sydney, N.S.

B2A 2M1

Stephen Lank, 94 McGill Avenue, Charlottetown, P.E.I.

C1A 2K4

Michele Marchand, 33 Tilley Court, Lower Sackville, N.S.

B4C 1S9

David Matthews, 805 Beaverbank Road, R.R. No. 1, Lower Sackville, N.S. B4V 2S6

A. Findlay MacRae, P.O. Box 1426, Kent Avenue, Wolfville, N.S. B0P 1X0

Marion MacRae, R.R. No. 1, Elmsdale, N.S. B0N 1M0

Susan North, 173 Whitney Avenue, Sydney, N.S. B1P 5A1

Lisa Olie, 16 Linden Lane, Halifax, N.S. B3R 1M9

David Pace, R.R. No. 1, Tantallon, Halifax Co., N.S. B0J 3J0

Ann Richardson, 44 Kirkwood Drive, Moncton, N.B. E1A 4G7

Joseph Rowlands, P.O. Box 1078, Marystown, Nfld. A0E 2M0

Ian Shaw, Uigg, Vernon Bridge P.O., P.E.I. C0A 2E0

Janice Stewart, 42 Summer Street, Charlottetown, P.E.I.

C1A 2R1

Mark Tracey, R.R. No. 1, Windsor, Hants Co., N.S. B0N 2T0

Steven Vaughan, 2790 Connolly Street, Halifax, N.S. B3L 3N2

Crystal Ward, Box 2335, Springhill, N.S. B0M 1X0

Donna Wilson, R.R. No.2, Truro, N.S. B2N 5B1

Second Year—Class of '81

Angela Beyer, R.R. No. 3, Norton, N.B. E0G 2N0

Anne Burgoyne, 62 Champlain Drive, Saint John, N.B.

E2J 3C7

Glenna Chambers, R.R. No. 3, Bridgewater, N.S. B4V 2W2
Richard Chisholm, R.R. No. 2, Boylston, N.S. B0H 1G0
Andrew Clark, P.O. Box 868, Woodstock, N.B. E0J 2B0
Angela Coldwell, R.R. No. 1, Avonport, N.S. B0P 1B0
Raymond Conway, 23 Birch Street, Apt. 18, Bedford, N.S.
M. Norma Daigle, R.R. No. 1, Box 100, Richiboucto, N.B.
 E0A 2M0
Cynthia Delorey, Box 158, Pomquet, N.S. B2G 2L4
Shelley Doyle, 41 Cornell Street, Moncton, N.B. E1C 2W2
Christine Duncanson, R.R. No. 2, Falmouth, N.S.
Daniel Doucet, 542 High Street, Moncton, N.B.
Diane Ellison, Cogle Road, Sussex Corner, N.B. E0E 1R0
Frederick Fergus, 45 Grandview Avenue, Trenton, N.S.
 B0K 1X0
Guy Gosselin, P.O. Box 185, Dover Road, Fox Creek, N.B.
 E0A 1R0
Walter Hanam, R.R. No. 1, Baddeck, N.S. B0E 1B0
Beth Hublely, 61 Raymoor Drive, Dartmouth, N.S. B2X 1G8
Kathryn Hudson, R.R. No. 2, Stewiacke, N.S. B0N 2J0
Janet Hudgins, R.R. No. 1, Brookfield, N.S. B0N 1C0
J. Michael Hughes, R.R. No. 1, Blockhouse, N.S. B0I 1E0
Michael Kelly, R.R. No. 3, Mount Stewart, P.E.I.
Sherilyn Mullen, R.R. No. 2, Weymouth, Digby Co., N.S.
 B0W 3T0
Shawn Muzzerall, R.R. No. 1, Welsford, N.B. E0G 3G0
J. Anne MacDonald, R.R. No. 2, Albert Bridge, N.S.
Michael Newcombe, R.R. No. 1, Tyne Valley, P.E.I. C0B 2C0
Cindy Olsten, R.R. No. 1, Westville, Greenhill, N.S. B0K 2A0
Brian O'Neill, Belleisle Creek, N.B. E0G 1E0
Susan Patterson, 162 Bellevue Street East, Saint John, N.B.
 E2J 1L7
Michael Pickard, R.R. No. 3, Bath, N.B. E0J 1E0
Janice Pryor, 39 Beechwood Drive, Truro, N.S. B2N 1B3
Darlene Reginato, R.R. No. 2, Marion Bridge, N.S.
Stephen Sharp, R.R. No. 1, Brookfield, N.S. B0N 1C0
Douglas Singer, R.R. No. 2, Kennetcook, N.S. B0N 1P0
Tara Smith, 130 Howe Street, Sydney, N.S. B1P 4V2
Shelley Surette, 6 Summer Street, Yarmouth, N.S. B5A 1W6
Margaret Wright, R.R. No. 3, Stoney Creek, Moncton, N.B.
 E1C 8J7

Special Students

Frank Boothroyd, Box 188, Kensington, P.E.I. C0B 1M0

Nancy Brown, Box 112, Fruitvale, B.C. V0G 1L0

Eleanor Clark, R.R. No. 2, Scotsburn, Pictou Co., N.S. B0K 1R0

Andrew Currington, 13031-123A Avenue, Edmonton, Alberta

Tina Eichelberger, Box 26, Boylston, N.S. B0H 1G0

Deborah Gibb, Box 10, Barons, Alberta

Janice Hicklin, 2429 Cherokee Drive N., Calgary, Alberta

Remi LeMoine, 293 Old Hampton Road, Quispamsis, Kings
Co., N.B.

Kim Meinzinger, R.R. No. 1, Upper Bench Road, Penticton,
B.C. V2A 6J6

Beth McCully, 11 Main Street, Truro, N.S. B2N 4G4

Kevin Patterson, Wentworth Road, Windsor, N.S. B0W 2T0

Beverly Richardson, Site 8, Box 20, R.R. No. 1, Waverley, N.S.
B0N 2S0

Cathy Unreiner, 150 Herald Drive, N.W., Medicine Hat, Alberta
T1A 6Y2

Tammy Volk, Box 2, Rolling Hills, Alberta T0J 2S0

Michael Weatherbee, R.R. No. 1, Truro, N.S. B2N 5A9

Gary Westenenk, R.R. No. 1, St. Andrews, Antigonish Co., N.S.
B0H 1X0

