

NOVA SCOTIA

**AGRICULTURAL COLLEGE**

**CALENDAR 1977—1978**

**SEVENTY SECOND ANNUAL**

# CALENDAR

OF THE

**NOVA SCOTIA**

**AGRICULTURAL COLLEGE**

**TRURO**

UNDER

The Nova Scotia Department  
of Agriculture and Marketing

**1977—1978**

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**APPLICATION FOR ADMISSION (1977)  
NOVA SCOTIA AGRICULTURAL COLLEGE**

Date .....

Name in full .....

Address .....

Telephone No. ....

Name of Community .....

Birthday .....  
Day
Month
Year

Name of Parents .....

or  
 Next of Kin ..... Relationship .....

Address .....

If you were not in high school during the 1976-77 school year, what educational institution or institutions have you attended since you were in high school? .....

.....  
 Course Desired:

Technician:

|                          |                  |                   |
|--------------------------|------------------|-------------------|
| Agricultural Business —  | First year ..... | Second year ..... |
| Agricultural Engineering | First year ..... | Second year ..... |
| Animal Science —         | First year ..... | Second year ..... |
| Farm Equipment —         | First year ..... | Second year ..... |
| Plant Science —          | First year ..... | Second year ..... |

Technology:

|                         |                  |                   |
|-------------------------|------------------|-------------------|
| Biology Laboratory —    | First year ..... | Second year ..... |
| Chemistry Laboratory —  | First year ..... | Second year ..... |
| Farming —               | First year ..... | Second year ..... |
| Ornamental Horticulture | First year ..... | Second year ..... |
| Directed Studies —      | Final year ..... |                   |

Degree:

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

Applications for admission to the first year of the Degree Course will not be considered until an official transcript of matriculation marks (Provincial or School) has been submitted.

Applications for admission to the first year of the Technician or Technology Course will not be considered until an official transcript of the required marks (Provincial or School) has been submitted.

Candidates who have attended a post-secondary institution are also required to submit a transcript of the record there.

What high school did you attend? .....

.....  
 State employment experience, giving name and address of employers .....

.....  
 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**

**Questions to be answered and form returned to:**  
**THE REGISTRAR**  
**THE NOVA SCOTIA AGRICULTURAL COLLEGE**  
**TRURO**

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



# 1977 CALENDAR

| JULY |    |    |    |    |    |    |
|------|----|----|----|----|----|----|
| S    | M  | T  | W  | T  | F  | S  |
|      |    |    |    |    | 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   | .. | .. | .. | .. | .. | .. |

| AUGUST |    |    |    |    |    |    |
|--------|----|----|----|----|----|----|
| S      | M  | T  | W  | T  | F  | S  |
|        | 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 | .. | .. | .. |

| SEPTEMBER |    |    |    |    |    |    |
|-----------|----|----|----|----|----|----|
| S         | M  | T  | W  | T  | F  | S  |
|           |    |    |    | 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 |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| S       | M  | T  | W  | T  | F  | S  |
|         |    |    |    |    |    | 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 | .. | .. | .. | .. | .. |

| NOVEMBER |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|
| S        | M  | T  | W  | T  | F  | S  |
|          |    | 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 | .. | .. | .. |

| DECEMBER |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|
| S        | M  | T  | W  | T  | F  | S  |
|          |    |    |    | 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 |

# 1978 CALENDAR

| JANUARY |    |    |    |    |    |    |
|---------|----|----|----|----|----|----|
| S       | M  | T  | W  | T  | F  | S  |
| 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 | .. | .. | .. | .. |

| FEBRUARY |    |    |    |    |    |    |
|----------|----|----|----|----|----|----|
| S        | M  | T  | W  | T  | F  | S  |
|          |    |    | 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 | .. | .. | .. | .. |

| MARCH |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|
| S     | M  | T  | W  | T  | F  | S  |
|       |    |    | 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 |    |    |    |    |    |    |
|-------|----|----|----|----|----|----|
| S     | M  | T  | W  | T  | F  | S  |
|       |    |    |    |    |    | 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    | .. | .. | .. | .. | .. | .. |

| MAY |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|
| S   | M  | T  | W  | T  | F  | S  |
|     | 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 | .. | .. | .. |

| JUNE |    |    |    |    |    |    |
|------|----|----|----|----|----|----|
| S    | M  | T  | W  | T  | F  | S  |
|      |    |    |    | 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-1977-78 1977

|                   |   |
|-------------------|---|
| August 22-Sept 2  | Chemistry refresher course for selected first-year Degree students (Commences at 1:30 p.m.).                      |
| August 29-Sept. 9 | Chemistry and Mathematics refresher courses for selected first-year Technician students (commences at 1:30 p.m.). |
| Sept 7-9          | Supplementary examinations  |
| Sept. 12          | Registration for students registering for first time.   |
| Sept. 13          | Registration for returning students   |
| Sept. 14          | Lectures commence at 8:15 a.m.  |
| October 10        | Thanksgiving Day. No classes  |
| Nov. 3-4          | College Royal   |
| Nov. 11-13        | Long week-end. No classes   |
| Dec. 10-21        | First semester examinations   |

### 1978

|                |  |
|----------------|--|
| January 9      | Second semester lectures commence at 8:15 a.m. |
| Feb. 25-Mar. 5 | Mid-term break for individual study            |
| March 24       | Good Friday. No classes                        |
| April 17-27    | Second semester examinations                   |
| May 3          | Graduation exercises.                          |

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

- for Refresher course students, the mornings of August 22 and 29.
- for students who have to write supplemental examinations, after dinner on September 6.
- for all new students, after dinner on September 11
- for all other students, after dinner on September 12.



Any student who wishes to use residence facilities before the times set down above will be charged at the rate of \$5.00 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 term payments in the Accounting Office not later than September 9, a penalty of \$5.00 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**

J.E. SHUH, B.S.A. (Toronto), M.Sc. (McGill)

### **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. (Punjab), Dip. L. Sc.,  
(Punjab)

### **Dean of Students—Chaplain**

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

### **Deans of Residence**

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

S.J.B. STACKHOUSE, B. Sc. (Ag. Ec.) (Guelph), M.Sc. (Guelph)

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

**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. Mac Rae, B.Sc. (Agr.) (McGill), M.Sc. (McGill), Ph. D. (McGill)

**Agricultural Engineering**

D.E. CLARK, B.S.A. (Toronto), M.S.A. (Toronto)  
**Associate Professor**

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

J.T. MacAULAY, B.S.A. (Toronto), B.E. (Nova Scotia Technical College), M. Sc. (Guelph)  
**Assistant Professor**

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

J.D. MacAULAY, B.S.A. (Toronto), M.Sc. (Guelph), Ph. D. (Br. Columbia)  
**Visiting Lecturer**

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

## **Animal Science**

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

**Professor**

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

**Associate Professor**

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)

**Assistant Professor**

D.C. CROBER, B.Sc. (Agr.) (McGill), M.Sc. (McGill),  
Ph.D. (British Columbia)

**Associate Professor**

A.R. MAIN, D.V.M. (Guelph)

**Sessional Lecturer [N.S. Dept of Agriculture]**

G.W. CHANT, B.S.A. (Guelph)

**Sessional Lecturer [N.S. Dept. of Agriculture]**

## **Biology**

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

**Professor**

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)

**Associate Professor**

L.J. EATON, B.Sc. (Acadia), M.Sc. (Dalhousie)

**Assistant Professor**

R.B. PORTH, B.S.A. (Br. Columbia), M.S.A. (Br. Columbia), Ph.D. (McGill)

**Assistant Professor**

L.E. CROSBY, B.Sc. (Acadia), M.Sc. (Acadia)

**Assistant Professor**

R.K. PRANGE, B.Sc. (Acadia), M.Sc. (Br. Columbia)

**Lecturer**

## **Chemistry**

W.M. LANGILLE, B.Sc. (Acadia), M.Sc. (McGill)

**Professor**

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

**Principal and Professor**

J.E. HAWLEY, B.Sc. (Agr.) (McGill)

**Assistant Professor**

H.M. MacCONNELL, B.Sc. (Agr.) (McGill), M.Sc. (McGill)

**Assistant Professor**

A.S. PAYNE, B. Sc. (Agr.) (McGill), M. Sc. (McGill)

**Assistant Professor**

K.S. MacLean, B. Sc. (Dalhousie), m.Sc. (McGill)

**Associate Professor**

A.R. ROBINSON, B.Sc. (Agr.) (McGill), M.Sc. (McGill),  
Ph.D. (McGill)

**Assistant Professor**

J.B. GOIT, B.Sc. (Earth Sciences) (Guelph), M.Sc.  
(Guelph)

**Sessional Lecturer (N.S. Dept. of Agriculture)**

## **Economics and Business Management**

J.C. TAIT, B.Sc. (Agr.) (McGill), M.Sc. (New Hampshire)

**Assistant Professor**

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

**Associate Professor**

D.E. ARNFAST, B.B.A. (St. Francis Xavier)

**Lecturer**

S.J.B. STACKHOUSE, B.Sc. (Ag. Ec.) (Guelph), M.Sc. (Guelph)

[Lecturer]

### **Humanities**

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

**Assistant Professor**

PARKER COX, B.A. (Acadia), M.A. (Toronto)

**Professor Emeritus**

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

**Assistant Professor**

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

**Assistant Professor**

P.M. SANGER, B.A. (Melbourne), B.Ed. (Acadia), M.A. (Victoria)

**Assistant Professor**

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

**Lecturer**

### **Mathematics and Physics**

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

**Associate Professor**

S.G. SMITH, B.Sc. (Mt. Allison), M.Sc. (Windsor)

**Associate Professor**

R.V. BUCKLER, B.Sc. (Acadia), B.Ed. (Acadia)

**Assistant Professor**

V.L. SAXON, B.Sc. (Dalhousie), B.Ed. (Acadia), B.Eng. (N.S. Technical College)

**Assistant Professor**

### **Plant Science**

J.S. BUBAR, B.Sc. (Agr.) (McGill), M.S. (Pennsylvania State), Ph.D. (McGill)

**Professor**

J.E. SHUH, B.S.A. (Toronto), M.Sc. (McGill)

**Professor**

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

**Associate Professor**

W. BADCOCK, B.Sc. (Agr.) (McGill), M.Sc. (McGill)

**Assistant Professor**

D.R. LYNCH, B.Sc. (Agr.) (Natal), M.Sc. (Natal), Ph.D. (Guelph)

**Assistant Professor**

J.A. MORLEY, B.S. (Texas Tech), M.S. (Texas Tech), N.P.D.

**Assistant Professor**

R. W. DANIELS, B.Sc. (Agr), (McGill), M.S. (Michigan State)

**Assistant Professor**

### **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.

All payments are to be made on the dates stated. Fees not paid at registration time are subject to a late payment fee of \$20, which will increase to \$30 on October 31, 1977 and February 17, 1978. This also applies to students who have applied for Canada Student Loans and have not had them finalized.

### **DEGREE COURSES**

Payments due September 12, 1977

|  |              |
|--|--------------|
| Tuition . . . . .                        | \$300        |
| Board and lodging . . . . .              | \$570        |
| Caution and laboratory deposit . . . . . | 30           |
| Students' Council . . . . .              | 56           |
| Medical fee . . . . .                    | 6            |
|  | <u>\$962</u> |

Payments due January 9, 1978

|                         |              |
|-------------------------|--------------|
| Tuition .....           | \$300        |
| Board and lodging ..... | \$630        |
|                         | <u>\$930</u> |

Books (estimated), September 12, 1977 .....\$100

It is recommended that every student registering for a Chemistry course purchase and use a laboratory coat. Estimated cost, \$8-\$10.

**TECHNICIAN AND TECHNOLOGIST COURSES**

Tuition is free to residents of the Atlantic Provinces, the governments of which are sharing operating costs of these Courses.

Payments due September 12, 1977

|                                      |                  |
|--------------------------------------|------------------|
| Board and lodging .....              | \$570            |
| Caution and laboratory deposit ..... | 30 <sup>32</sup> |
| Students' Council.....               | 56 <sup>57</sup> |
| Medical fee .....                    | 6                |
|                                      | <u>662</u>       |

Payments due January 9, 1978

|                         |       |
|-------------------------|-------|
| Board and lodging ..... | \$630 |
|-------------------------|-------|

Books (estimated), September 12, 1977 ..... \$ 75

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 the commencement of lectures will receive no refund of the tuition fee. Keeping in mind that no part of the registration deposit will be refunded, a student who withdraws after the first two weeks of 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 him.

## **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 \$30.00 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 up to \$2800 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<br>Box 578<br>Halifax, N.S.<br>B3J 2S9             |
| New Brunswick students        | — | Department of Youth<br>Centennial Building<br>Fredericton, N.B.<br>E3B 5H1 |
| Prince Edward Island students | — | Department of Education<br>Box 2000<br>Charlottetown, P.E.I.<br>C1A 7N8    |
| Newfoundland students         | — | Department of Education<br>Confederation Building<br>St. John's, Nfld.     |

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, he may take it to any bank to arrange for funds.

A student who intends to finance his education with Canada Student Loan funds but has not received his Certificate of Eligibility prior to registration must pay the required fees at registration time. He should, therefore, arrange the necessary temporary financing before his arrival for registration.

*Assistance under the Student Loan Plan,  
422 424-4191  
M. Krick*

## 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 1977-78 credits towards a science degree in Agriculture, an engineering degree in Agriculture, a pre-veterinarian course, five technician courses, five technology courses and vocational short courses will be offered.

During the seventy-two 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 leading to 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.

Students registered in the Degree Course in Agricultural Science can prepare themselves for application for admission to the Ontario Veterinary College, University of Guelph.

Graduates of the pre-engineering course at the Nova Scotia Agricultural College will be admitted without further examination by the Nova Scotia Technical College to the second last year of a course leading to the degree of Bachelor of Engineering with specialization in Agricultural Engineering.

The University of Maine will consider for admission to its second last year in Agricultural Science a limited number of graduates of the Nova Scotia Agricultural College who have been recommended by the Principal.

To the student who wishes to farm, to accept employment in a farm-related industry, or to engage in professional agriculture, the College offers courses designed to better fit him for the line of endeavor he wishes to follow.

Agriculture offers to the alert man 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 man 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-two 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 north-east of Truro, Nova Scotia.

The College is well equipped with buildings. Cumming Hall, Harlow Institute, The Agricultural Engineering Building, The Collins Horticultural Building, The Dairy Building, The Cox Institute of Agricultural Technology, The Boulden Building, The Agricultural Mechanics Building, The 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 and Chapman House provide living accommodations for male and female students. A new athletic complex will be available for students registering in the fall of 1977.

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.

The various courses arranged for the 1977-78 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.

**Post Office Address:**

All mail should be addressed:  
Nova Scotia Agricultural College, 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 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:**

The following churches, to which students are invited, are located in Truro and Bible Hill:

First Baptist Church  
Immanuel Baptist Church  
Zion Baptist Church  
St. John's Anglican Church  
St. George's Anglican Church  
St. James Presbyterian Church  
First United Church  
Brunswick Street United Church  
St. Andrew's United Church  
St. David's United Church  
Salvation Army  
Calvary Pentecostal Church  
Wesleyan Methodist Church  
Church of the Immaculate Conception  
John Calvin Christian Reformed Church



## **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.

No smoking is allowed in classrooms or laboratories during regular class and laboratory hours, in the gymnasium or in the Dining Hall during regular meals.

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 over night visitors in a residence must obtain permission from the Dean of Students.

Meal tickets for single meals may be bought from the attendant at the door of the cafeteria.

### **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 \$5.00 fee is charged for registration. Vehicles brought to

campus during the year will be registered with the Campus Parking 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. Freshman students will be assigned parking space at the paved parking lot next to the Poultry Building.
5. Faculty and staff will obtain registration forms and stickers from the Campus Parking Committee.
6. The specified parking areas which are to be used are noted on campus maps and by signs at parking locations.
7. The on campus student parking areas are designated as:
  - (a) behind Chapman House
  - (b) slotted area to rear of Cumming HallAll other areas which comprise the N.S.A.C. area are off limits to in-residence student parking.
8. The parking and traffic regulations will be enforced by the Parking Committee, Resident Deans and Grounds Superintendent.
9. Vehicles parked in unauthorized areas will be towed away at the owners 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 with the letter of 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.

### **RAILROAD FARES REFUNDED**

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.

### **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 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 throughout the year with units of competition formed on a class basis. A variety of sports is offered including softball, soccer, hockey, basketball, volleyball, badminton, curling and cross-country skiing.

(b) Intercollegiate Athletics: The men's and women's division of athletics compete in the Nova Scotia College Conference. Field hockey, soccer, basketball and hockey 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 U.N.B. and Macdonald College.

(c) Physical Education (H05): This is an elective program of life long activities offered and open to all interested students. These activities include tennis, golf, swimming, equestrian training, cross-country skiing, badminton and curling.

## **ATHLETIC REGULATIONS**

All students are eligible to play for teams representing the College, subject to the conditions of the Atlantic Intercollegiate Athletic Association:

1. A student may not carry more than one subject from year to year.
2. Any first year subject must be cleared prior to third year participation.

3. A student repeating a year and a transferred failed student are ineligible to play.
4. A student withdrawing at Christmas is ineligible to participate until a year following the date of his withdrawal, providing at that time, the student has an academic record that permits his participation.

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.

## **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 a contest among 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.

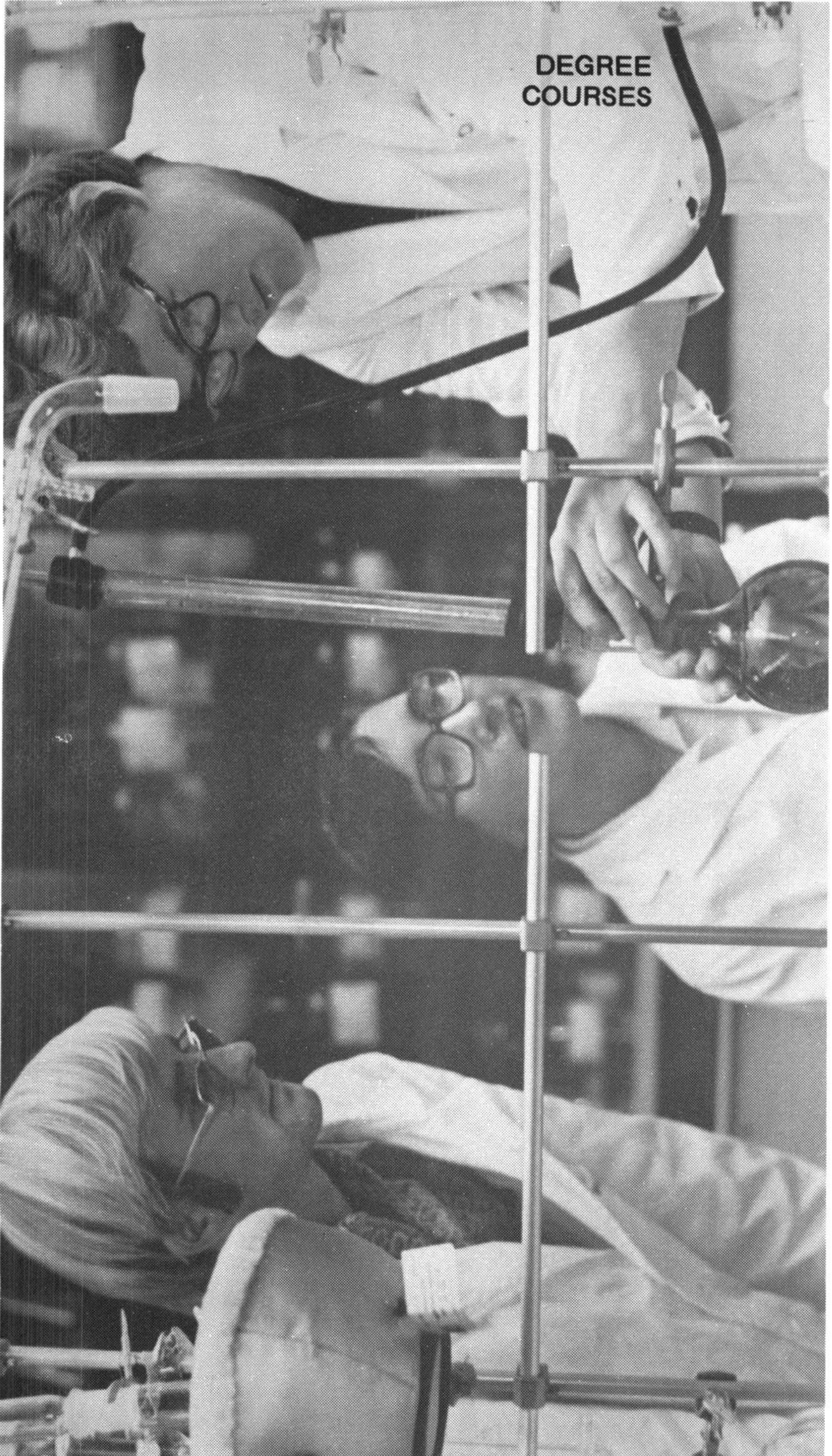
The program and show are administered by students who hold the various offices necessary for the satisfactory operation of an exhibition.



# FRASER HOUSE



**DEGREE  
COURSES**





# DEGREE COURSES

The Nova Scotia Agricultural College offers the first two years of a four year course leading to a degree in Agricultural Science and the first two years of a four year course leading to a degree in Agricultural Engineering. 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 Nova Scotia Technical College for the final two years. Qualified graduates may be considered for admission to the course in veterinary medicine offered by the University of Guelph.

Graduates in Agricultural Science may choose from a wide variety of disciplines in their final two years; economics, the pure sciences, agricultural science, the environmental sciences and food science.

Students who complete the prescribed number of credits with no mark below fifty per cent 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, a high honours diploma will be awarded to a student who has attained an average of eighty per cent or better on the work of the two years and an honours diploma to one who has attained an average of at least seventy-five per cent.

In Agricultural Engineering, a high honours diploma will be awarded to a student who has attained an average of eighty per cent or better on the work of the second and third years and an honours diploma to one who has attained an average of at least seventy-five per cent.

## **Entrance Requirements**

- (a) 1. All candidates for admission to the Agricultural Science Degree Course or 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, Biology or Physics and one additional subject.
2. All candidates for admission to the Agricultural Engineering Degree course must: present certificates showing an average of at least 60% 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).
- (b) present a satisfactory medical certificate dated not more than thirty days prior to registration.

## **Supplemental Examinations**

A student who has made an average of at least 50% and has passed in at least half of his subjects may write one supplemental examination in any failed subject on which he has made at least 35%. The supplemental examination must be written in either June or September immediately following, unless the failure is made in the first term of the final year, in which case an examination may be written before January 31 immediately following.

Application for permission to write a supplemental examination in June must be submitted before June 10 and for permission to write in September before August 19.

The fee for a supplemental examination will be \$5.00. 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 present himself for an examination, he may, at the discretion of the Registrar

and the instructor, be permitted to write upon payment of \$20.00 per examination.

### 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 55 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 in the first year of the curriculum, numbers 200 to 290 inclusive in the second year, and 300 to 390 inclusive in the third 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 credit 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, C10a is a chemistry subject offered in the first year, first semester of the technician courses. AE55b is an agricultural engineering subject offered in the second year, second semester of the Agricultural Engineering and Farm Equipment technician courses. B71b is a biology subject offered in the second year, second semester of the Chemistry Laboratory Technology Course.

The semester of the academic year in which a subject is scheduled to be offered is indicated by the small letters "a" (first semester), "b" (second semester), "a,b" (both first and second semester), or "c" (summer term) immediately following the course identification.

## SYLLABUS

### AGRICULTURAL SCIENCE

The requirement 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 of 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 17).

#### SEMESTER I

|         |  | Credits |
|---------|--|---------|
| B100a   | The Plant Kingdom                                  | 3       |
| C100a   | Chemical Principles                                | 3       |
| H200a   | Technical Writing and English and American Authors | 3       |
| MP100a  | Calculus and Analytic Geometry I                   | 3       |
| PS100a  | Principles of Crop Production                      | 3       |
| *B090a  | Principles of Biology                              |         |
| *MP090a | Introductory Physics                               |         |

\*B090 or MP090 will be taken unless the student has completed both these subjects at the Grade XII (N.S., N.B., P.E.I.) level or its equivalent.

#### SEMESTER II

|         |                                   |   |
|---------|-----------------------------------|---|
| AS100b  | Introductory Animal Science       | 3 |
| B110a,b | The Animal Kingdom                | 3 |
| C110b   | Organic Chemistry                 | 3 |
| EB100b  | Economics of Agriculture          | 3 |
| MP105b  | Calculus and Analytic Geometry II | 3 |
| MP110b  | Modern Physics                    | 3 |

## SEMESTERS III & IV

A student who successfully completes the first two semesters will normally take from 10 to 12 of the following subjects in 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.

|          |   | Credits |
|----------|---|---------|
| AE220a   | Agricultural Structures                     | 3       |
| AE230a   | Agricultural Mechanization                  | 2       |
| AE260c   | Surveying                                   | 2       |
| AS210a   | Selected Studies in Animal Science          | 3       |
| B220a    | Cell Biology                                | 3       |
| B205b    | Histology                                   | 3       |
| B210a    | Embryology                                  | 3       |
| B220a    | Microbiology for Engineers                  | 3       |
| B225b    | Microbiology                                | 3       |
| B240a    | Introduction to Genetics                    | 3       |
| B245b    | Agricultural Genetics                       | 3       |
| B260b    | Plant Physiology                            | 3       |
| B270a    | Principles of Ecology                       | 3       |
| C200a    | Biochemistry I                              | 3       |
| C205b    | Biochemistry II                             | 3       |
| C220a    | Introduction to Soil Science                | 3       |
| EB200a   | Principles of Economics-Micro               | 3       |
| EB210a   | Accounting                                  | 3       |
| EB220b   | Production Economics                        | 3       |
| EB230a   | Principles of Marketing                     | 3       |
| EB240a   | Farm Management                             | 3       |
| EB250b   | Macro Economics                             | 3       |
| EB260b   | Quantitative Economics                      | 3       |
| H120a    | Sociology I                                 | 3       |
| H125b    | Sociology II                                | 3       |
| H140a,b  | Personnel Management                        | 3       |
| H150b    | History of Agriculture                      | 2       |
| H205b    | Canadian Literature                         | 3       |
| H210b    | Communications and Extension Methods        | 3       |
| MP200a,b | Statistics and Agricultural Experimentation | 3       |
| MP210a   | Electrical Phenomena                        | 3       |
| PS200b   | Greenhouse Crop Production and Floriculture | 3       |

## 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 Nova Scotia Technical College. Though most select the Agricultural Engineering option at N.S.T.C., other majors in Engineering are available to them. Graduates may also be admitted to the third year of Engineering at other Universities.

### SEMESTER I

|        |  | Credits |
|--------|--|---------|
| AE100a | Graphics and Projection                            | 3       |
| AE110a | Statics  | 3       |
| C120a  | Engineering Chemistry I                            | 3       |
| H200a  | Technical Writing and English and American Authors | 3       |
| MP100a | Calculus and Analytic Geometry                     | 3       |
| PS110a | General Plant Science                              | 2       |

### SEMESTER II

|        |                          |   |
|--------|--------------------------|---|
| AE105b | Graphics and Design      | 3 |
| AE120b | Dynamics                 | 3 |
| AE260c | Surveying                | 2 |
| C125b  | Engineering Chemistry II | 3 |
| EB250b | Macro Economics          | 3 |
| MP106b | Calculus for Engineers   | 3 |
| MP120b | Electrical Phenomena     | 3 |

### SEMESTER III

|        |                            |   |
|--------|----------------------------|---|
| AE225a | Thermodynamics             | 3 |
| AE240a | Material Science           | 3 |
| AS220a | Animal Science             | 2 |
| B220a  | Microbiology for Engineers | 3 |
| MP220a | Computer Programming       | 3 |
| MP230a | Multivariable Calculus     | 3 |
| MP240a | Electric Circuits          | 3 |

## SEMESTER IV

Credit

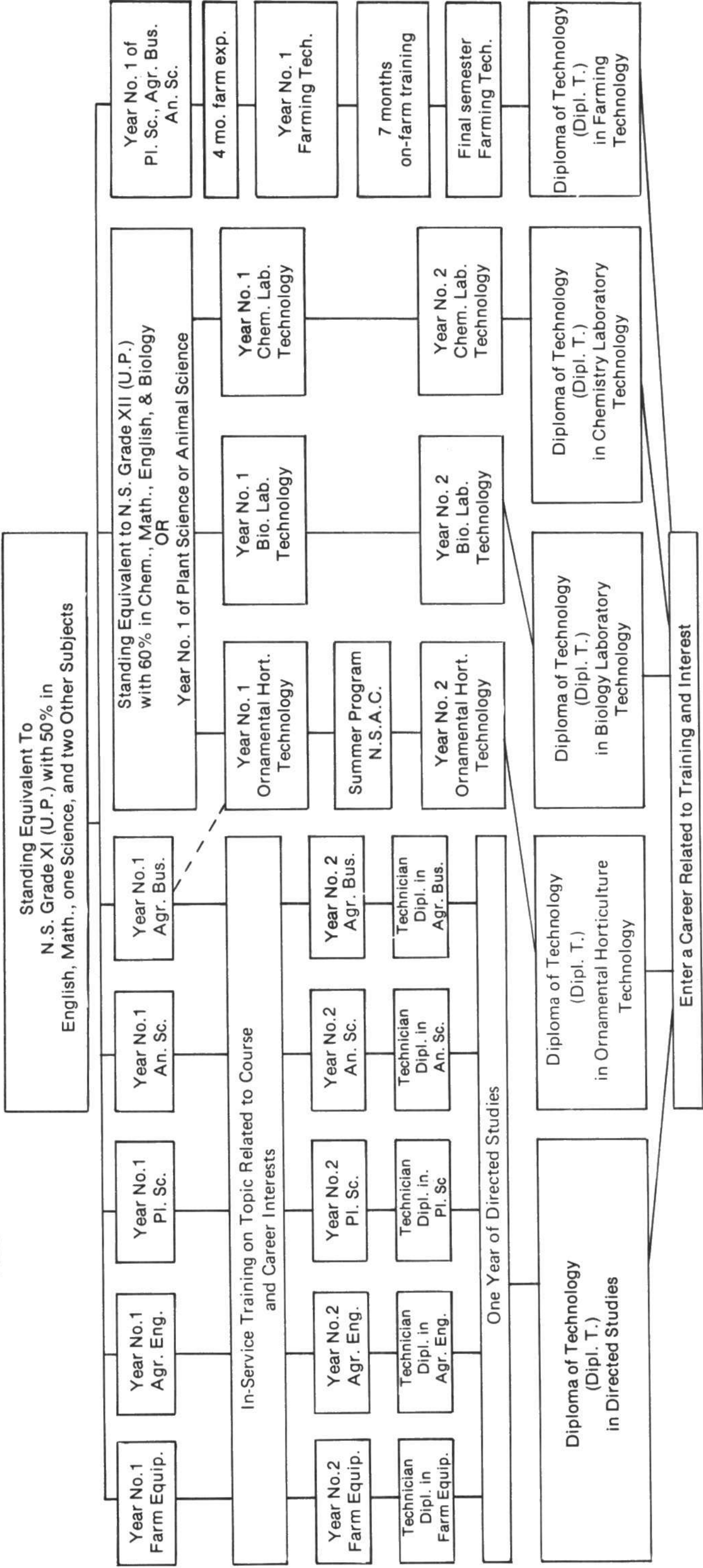
|        |  |   |
|--------|--|---|
| AE220b | Agricultural Structures                      | 2 |
| AE230b | Agricultural Mechanization                   | 2 |
| AE245b | Strength of Materials                        | 3 |
| AE250b | Fluid Mechanics                              | 3 |
| EB250b | Economics of Agriculture                     |   |
| H205b  | Canadian Literature                          |   |
| MP235b | Differential Equations<br>and Linear Algebra | 3 |







# 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 present themselves for a selection interview when required.

(d) must present evidence of having obtained pass standing in one of the programs (university preparatory) outlined below:

(1) Nova Scotia — 011 or better, English, Mathematics, a science, and two additional subjects;

(2) New Brunswick — 122 English and 112 or better Mathematics, a science and two additional subjects;

(3) Prince Edward Island — Grade XII English, Grade XI or better Mathematics, a science and two additional subjects;

(4) Newfoundland — Grade XI English, Mathematics, a science and two additional subjects.

Applicants of mature age or from a general course program can be considered if they offer evidence of probable success.

Candidates with at least 60% in Mathematics at the 012 (N.S.) level, the 122 (N.B.) level, or the Grade XII (P.E.I.) level will be exempted from Mathematics MP10 and MP11.

Candidates with at least 60% in Chemistry at the 012 (N.S.) level, the 122 (N.B.) level, or the Grade XII (P.E.I.) level will be exempted from Chemistry C10 and C11.

Candidates with pass standing in Biology at the 012 (N.S.) level, the 122 (N.B.) level, or the Grade XII (P.E.I.) level will be exempted from Biology B10(a).

Candidates for Agricultural Engineering with pass standing in Physics at the 012 (N.S.) level, the 122 (N.B.) level or the Grade XII (P.E.I.) level will be exempted from Physics MP12.

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

Students who complete all the course requirements with no mark below fifty per cent 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 eighty per cent and an honours diploma to one who has attained an average of at least seventy-five percent.

### **Refresher Course**

Candidates whose preparation is not considered adequate may be required to enrol for a refresher course in one or more subjects which will be offered from August 29 to September 9. The additional cost will be for books and for board and lodging.

### **Supplemental Examinations**

A student in a Technician Course may write a supplemental examination in a maximum of three subjects if his 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. He may not register for the regular second academic year if he, after writing supplementals, has failed to receive a pass mark in more than two subjects.

A member of the graduating class who has no outstanding subjects from first year and who fails one subject only (the mark must be at least 35%) in the first semester of the final year, may write a supplemental examination before January 31 immediately following.

Application for permission to write a supplemental examination in June must be submitted before June 10 and for permission to write in September before August 19.

The fee for a supplemental examination in any subject will be \$5.00. 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.

### **Financial Assistance**

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 Extension, Department of Agriculture, 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 for this allowance.

### **Career Introduction Program**

All first year students will be strongly encouraged to complete a career introduction program between their first and second years. A statement of the student's progress in this program will be included in his record as evidence of supplemental training.

## 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.

### FIRST ACADEMIC YEAR

| Semester A                       |           | Semester B                            |           |
|----------------------------------|-----------|---------------------------------------|-----------|
| Course No. and Name              | Lec. Lab. | Course No. and Name                   | Lec. Lab. |
| AE10a Agricultural Engineering I | 2 2       | AE17b Agricultural Engineering II     | 2 2       |
| B10a Biology I                   | 3 4       | B12b or B14b Biology (optional)       | 2 4       |
| C10a Chemistry I                 | 2 2       | C11b Chemistry II                     | 2 2       |
| C12a Soil Physics                | 2 2       | C13b Soil Chemistry                   | 2 2       |
| EB10a Accounting                 | 2 2       | EB11b Applied Accounting and Taxation | 2 2       |
| EB12a Macro Economics            | 3 0       | EB13b Micro Economics                 | 3 0       |
| H10a,b) Technical Writing        | 3 0       | H11b Modern Literature (opt.)         | 3 0       |
| MP10a Agricultural Mathematics I | 3 0       | H12b Leadership Development           | 1 week    |
|                                  |           | MP11b Agricultural Mathematics II     | 3 0       |

### SECOND ACADEMIC YEAR

| Semester A                             |          | Semester B                                 |          |
|--|----------|--|----------|
| Course No. and Name                    | Lec. Lab | Course No. and Name                        | Lec. Lab |
| AE40a Field Machinery                  | 2 2      | AE61b Farm Tractors                        | 2 2      |
| EB40a Marketing Practices              | 1 4      | EB41b Business Law                         | 3 0      |
| EB43a,b Agricultural Business Project  | 0 4      | EB42b Applied Farm Management              | 1 4      |
| EB240a Farm Management                 | 3 2      | EB220b Production Economics                | 2        |
| ✓H120a Sociology I                     | 3 0      | H12b Leadership Development                | 1 week   |
| ✓H140a Personnel Management            | 3 0      | H125b *Sociology II                        | 3 0      |
| PS40a *Field Crop Production I         | 2 2      | or   |          |
|  |          | H210b *Communications & Extension Methods  | 3 0      |
|  |          | PS41b *Field Crop Production II            | 2 2      |
| <b>EITHER BLOCK A</b>                  |          |  |          |
| PS53a Vegetable Production             | 3 4      | PS42b Cash Crops & Seed Production         | 2 1      |
|  |          | or   |          |
|  |          | PS49b Potato Production                    | 2 2      |
| <b>OR. BLOCK B</b>                     |          |  |          |
| AS10a *Livestock Production (ruminant) | 3 2      | AS12b *Livestock Production (non-ruminant) | 3 2      |

\*Students may apply to take a substitute production subject

## AGRICULTURAL ENGINEERING TECHNICIAN

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

### FIRST ACADEMIC YEAR

| Semester A                       |          | Semester B                        |          |
|----------------------------------|----------|-----------------------------------|----------|
| Course No. and Name              | Lec. Lab | Course No. and Name               | Lec. Lab |
| AE12a Drafting I                 | 0 4      | AE19b Drafting II                 | 0 4      |
| AE13a Shopwork I                 | 2 4      | AE20b Shopwork II                 | 2 4      |
| AE14a Surveying                  | 2 2      | AE21b Oil Hydraulics I            | 2 2      |
| EB10a Accounting                 | 2 2      | AE22b Engineering Principles      | 3 0      |
| or                               |          | EB11b Applied Accounting          | 2 2      |
| EB12a Macro Economics            | 3 0      | and Taxation or                   |          |
| H10a,b Technical Writing         | 3 0      | EB13b Micro Economics             | 3 0      |
| MP10a Agricultural Mathematics I | 3 0      | H11b Modern Literature (opt.)     | 3 0      |
| MP12a Statics                    | 2 4      | H12b Leadership Development       | 1 week   |
| PS12a Soils & Crops I            | 2 2      | H140b Personnel Management        | 3 0      |
|                                  |          | MP11b Agricultural Mathematics II | 3 0      |
|                                  |          | PS13b Soils & Crops II            | 2 2      |

### SECOND ACADEMIC YEAR

| Semester A                            |          | Semester B                                   |          |
|---------------------------------------|----------|--|----------|
| Course No. and Name                   | Lec. Lab | Course No. and Name                          | Lec. Lab |
| AE41a Farm Buildings I                | 2 4      | AE51b Farm Buildings II                      | 1 4      |
| AE42a Farm Power I                    | 2 4      | AE52b Farm Power II                          | 1 4      |
| AE43a Farm Machinery I                | 2 4      | AE53b Farm Machinery II                      | 1 4      |
| AE45a Soil & Water Management         | 2 2      | AE55b Materials Handling Equipment           | 2 4      |
| AE47a Agr. Engineering Project        | 0 2      | AE58b Electrical Controls                    | 1 4      |
| AS10a Livestock Production (ruminant) | 3 2      | AE62b Properties of Materials                | 1 2      |
| B10a Biology I                        | 3 4      | AS12b Livestock Production<br>(non-ruminant) | 3 2      |
|                                       |          | H12b Leadership Development                  | 1 week   |

## 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.

### FIRST ACADEMIC YEAR

| Semester A                            |      |     | Semester B                                   |        |      |
|---------------------------------------|------|-----|--|--------|------|
| Course No. and Name                   | Lec. | Lab | Course No. and Name                          | Lec.   | Lab. |
| AE10a Agricultural Engineering I      | 2    | 2   | AE17b Agr. Engineering II                    | 2      | 2    |
| AS10a Livestock Production (ruminant) | 3    | 2   | AS12b Livestock Production<br>(non-ruminant) | 3      | 2    |
| AS11a,b Animal Husbandry Skills       | 0    | 2   | B14b Biology                                 | 2      | 4    |
| B10a Biology I                        | 3    | 4   | C11b Chemistry II                            | 2      | 2    |
| C10a Chemistry I                      | 2    | 2   | C13b Soil Chemistry                          | 2      | 2    |
| C12a Soil Physics                     | 2    | 2   | H11b Modern Literature (Opt.)                | 3      | 0    |
| H10a,b Technical Writing              | 3    | 0   | H12b Leadership Development                  | 1 week |      |
| MP10a Agricultural Mathematics I      | 3    | 0   | MP11b Agricultural Mathematics II            | 3      | 0    |

### SECOND ACADEMIC YEAR

| Semester A                     |      |     | Semester B                      |        |      |
|--------------------------------|------|-----|---------------------------------|--------|------|
| Course No. and Name            | Lec. | Lab | Course No. and Name             | Lec.   | Lab. |
| AE40a Field Machinery          | 2    | 2   | AE61b Farm Tractors             | 2      | 2    |
| AS40a Feeds and Feeding        | 3    | 2   | AS43b Meat & Livestock Products | 2      | 2    |
| AS41a Milk & Dairy Products    | 2    | 2   | AS44b Animals Breeding          | 3      | 0    |
| AS42a Breeds & Selection       | 1    | 2   | AS45b Animal Science Seminar    | 1      | 0    |
| AS46a Animal Physiology        | 2    | 2   | AS47b Animal Pathology          | 2      | 2    |
| AS48a,b Animal Science Project | 0    | 4   | EB13b Micro Economics           | 3      | 0    |
| EB12a Macro Economics          | 3    | 0   | H12b Leadership Development     | 1 week |      |
| H120a Sociology I              | 3    | 0   | H125b Sociology II              | 3      | 0    |
| PS40a Field Crops Production I | 2    | 2   | or                              |        |      |
|                                |      |     | H140b Personnel Management      | 3      | 0    |
|                                |      |     | PS41b Field Crops Production II | 2      | 2    |

## FARM EQUIPMENT TECHNICIAN

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

### FIRST ACADEMIC YEAR

| Semester A                       |      |      | Semester B                                  |      |      |
|----------------------------------|------|------|---|------|------|
| Course No. and Name              | Lec. | Lab. | Course No. and Name                         | Lec. | Lab. |
| AE12a Drafting I                 | 0    | 4    | AE19b Drafting II                           | 0    | 4    |
| AE13a Shopwork I                 | 2    | 4    | AE20b Shopwork II                           | 2    | 4    |
| AE14a Surveying                  | 2    | 2    | AE21b Oil Hydraulics I                      | 2    | 2    |
| EB10a Accounting<br>or           | 2    | 2    | AE22b Engineering Principles                | 3    | 0    |
| EB12a Macro Economics            | 3    | 0    | EB11b Applied Accounting<br>and Taxation or | 2    | 2    |
| H10a,b Technical Writing         | 3    | 0    | EB13b Micro Economics                       | 3    | 0    |
| MP10a Agricultural Mathematics I | 3    | 0    | H11b Modern Literature (opt.)               | 3    | 0    |
| MP12a Statics                    | 2    | 4    | H12b Leadership Development                 | 1    | week |
| PS12a Soils & Crops I            | 2    | 2    | H140b Personnel Management                  | 3    | 0    |
|                                  |      |      | MP11b Agricultural Mathematics II           | 3    | 0    |
|                                  |      |      | PS13b Soils & Crops II                      | 2    | 2    |

### SPRING PROGRAM: SEMESTER C

|                                |             |
|--------------------------------|-------------|
| <b>Course No. and Name</b>     | <b>Time</b> |
| AE23c Farm Equipment Servicing | 6 weeks     |

### SECOND ACADEMIC YEAR

| Semester A                 |      |      | Semester B                            |      |      |
|----------------------------|------|------|---------------------------------------|------|------|
| Course No. and Name        | Lec. | Lab. | Course No. and Name                   | Lec. | Lab. |
| AE42a Farm Power I         | 2    | 4    | AE52b Farm Power II                   | 1    | 4    |
| AE43a Farm Machinery I     | 2    | 4    | AE53b Farm Machinery II               | 1    | 4    |
| AE44a Welding I            | 0    | 4    | AE54b Welding II                      | 1    | 4    |
| AE46a Oil Hydraulics II    | 1    | 4    | AE55b Materials Handling<br>Equipment | 2    | 4    |
| AE48a Shop Management      | 2    | 2    | AE56b Tractor Overhaul                | 0    | 8    |
| AE49a Electrical Systems   | 1    | 3    | AE57b Equipment Overhaul II           | 0    | 8    |
| AE50a Equipment Overhaul I | 0    | 8    | AE60b Inventory Control               | 2    | 0    |
|                            |      |      | H12b Leadership Development           | 1    | week |



## 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.

### FIRST ACADEMIC YEAR

| Semester A                       |          | Semester B                        |           |
|----------------------------------|----------|-----------------------------------|-----------|
| Course No. and Name              | Lec. Lab | Course No. and Name               | Lec. Lab. |
| AE10a Agricultural Engineering I | 2 2      | AE17b Agricultural Engineering II | 2 2       |
| B10a Biology I                   | 3 2      | B12b Biology                      | 2 4       |
| B13a Plant Identification        | 2 2      | C11b Chemistry II                 | 2 2       |
| C10a Chemistry I                 | 2 2      | C13b Soil Chemistry               | 2 2       |
| C12a Soil Physics                | 2 2      | H11b Modern Literature (opt.)     | 3 0       |
| H10a,b Technical Writing         | 3 0      | H12b Leadership Development       | 1 week    |
| MP10a Agricultural Mathematics I | 3 0      | MP11b Agricultural Mathematics II | 3 0       |
| PS10a Plant Science Skills I     | 0 2      | PS11b Plant Science Skills II     | 0 4       |

### SECOND ACADEMIC YEAR

| Semester A                                 |           | Semester B                            |           |
|--|-----------|---------------------------------------|-----------|
| Required plus block A, B, or C Courses     |           |                                       |           |
| Course No. and Name                        | Lec. Lab. | Course No. and Name                   | Lec. Lab. |
| B43a Entomology                            | 2 2       | B40b Plant Pathology                  | 2 3       |
| EB10a Accounting                           | 2 2       | B41b Plant Physiology                 | 2 2       |
| H120a Sociology I                          | 3 0       | H12b Leadership Development           | 1 week    |
| PS52a,b Plant Science Project              | 0 4       | EB11b Applied Accounting and Taxation | 2 2       |
| Block A - Ornamental and Turf              |           |                                       |           |
| AE14a Surveying                            | 2 2       | H140b Personnel Management            | 3 0       |
| AE59a Horticultural Machinery              | 2 2       | PS46b Turf Management II              | 1 2       |
| PS45a Turf Management I                    | 2 2       | PS51b Ornamental Horticulture II      | 2 4       |
| PS50a Ornamental Horticulture I            | 2 4       |                                       |           |
| Block B - Greenhouse, Fruit & Garden Crops |           |                                       |           |
| AE59a Horticultural Machinery              | 2 2       | AE58b Electrical Controls             | 1 4       |
| H140a Personnel Management                 | 3 0       | PS44b Tree Fruits                     | 1 2       |
| PS43a Berry Crop Production                | 1 2       | PS48b Greenhouse Crops                | 1 2       |
| PS47a Greenhouses                          | 1 2       |                                       |           |
| PS53a Vegetable Production                 | 3 4       |                                       |           |
| Block C - Crop Production                  |           |                                       |           |
| AE40a Field Machinery                      | 2 2       | AE61b Farm Tractors                   | 2 2       |
| PS40a Field Crops Production I             | 2 2       | PS41b Field Crops Production II       | 2 2       |
| PS53a Vegetable Production                 | 3 4       | PS42b Cash Crops & Seed Production    | 2 1       |
|  |           | PS49b Potato Production               | 2 2       |

# TECHNOLOGY COURSES

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

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 directed studies.

## **Technology Studies for Graduate Technicians**

A candidate who has received his Technician Diploma in Agricultural Business, Agricultural Engineering, Animal Science, Farm Equipment or Plant Science or who has equivalent standing may apply for a year of directed study leading to a Diploma of Technology. If his study record is good and he shows evidence of being capable of doing independent study, his 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 Technologist Syllabus Committee; and
- (c) present himself 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 contain at least four one semester subjects, additional projects, and laboratory experience.

Candidates will, as a general rule, select courses from the following list:

- AS70b Animal Nutrition
- EB70a Farm Planning
- EB71b Market Planning
- MP70a Basic Statistics
- PS76b Crop Physiology
- Selected subjects from Technician courses
- Selected subjects from Degree courses for which prerequisites are met.

### **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 three ways:

(1) for Biology or Chemistry Laboratory Technology, he may satisfactorily complete the first year of a Technician Course in Animal Science or Plant Science, and, for Ornamental Horticulture Technology, he may satisfactorily complete the first year of a Technician Course in Animal Science, Plant Science or Agricultural Business:

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

or (3) he may complete university courses at the 100 level in English, Mathematics, Biology and Chemistry.

In addition each candidate must present a satisfactory medical certificate and present himself 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 56.

## BIOLOGY LABORATORY TECHNOLOGY

The Nova Scotia Agricultural College offers a course to help students prepare for work as a biology laboratory technologist 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.

Required Technician subjects or equivalent: B10a, B12b, or B14b  
C10a, C11b, MP10a, MP11b, and H10a,b

### FIRST ACADEMIC YEAR

| Semester A                    |      |     | Semester B                  |      |     |
|-------------------------------|------|-----|-----------------------------|------|-----|
| Course No. and Name           | Lec. | Lab | Course No. and Name         | Lec. | Lab |
| B43a Entomology               | 2    | 2   | B42b Laboratory Practices I | 2    | 3   |
| C42a Organic Chemistry        | 3    | 4   | C43b Bio-Organic Chemistry  | 3    | 4   |
| B100 Botany                   | 3    | 4   | B110b The Animal Kingdom    | 3    | 4   |
| H120a Sociology I             | 3    | 0   | MP41b Light and Optics      | 2    | 2   |
| MP40a Electrical Measurements | 2    | 2   |                             |      |     |

#### BLOCK A

|                           |   |   |                       |   |   |
|---------------------------|---|---|-----------------------|---|---|
| B13a Plant Identification | 2 | 2 | B40b Plant Pathology  | 2 | 3 |
|                           |   |   | B41b Plant Physiology | 2 | 2 |

#### BLOCK B

|                         |   |   |                        |   |   |
|-------------------------|---|---|------------------------|---|---|
| AS46a Animal Physiology | 2 | 2 | AS47b Animal Pathology | 2 | 2 |
|                         |   |   | AS70b Animal Nutrition | 3 | 0 |

### SECOND ACADEMIC YEAR

| Semester A                |      |      | Semester B                         |      |     |
|---------------------------|------|------|------------------------------------|------|-----|
| Course No. and Name       | Lec. | Lab. | Course No. and Name                | Lec. | Lab |
| B70a Microtechniques I    | 2    | 4    | B71b Microtechniques II            | 2    | 4   |
| B72a Lab Practices II     | 2    | 3    | B73b Microbiology                  | 2    | 3   |
| C45a Qualitative Analysis | 3    | 4    | C46b Quantitative Analysis         | 3    | 4   |
| H70a Typing               | 2    | 0    | H71b Office Practices and Business |      |     |
| MP70a Statistics          | 3    | 0    | Machines                           | 2    | 0   |
|                           |      |      | H125b Sociology II                 | 3    | 0   |
|                           |      |      | or                                 |      |     |
|                           |      |      | H140b Personnel Management         | 3    | 0   |
|                           |      |      | MP71b Computer Programming         | 1    | 0   |

In addition to these courses a Biology Project and Seminar Program, lasting the entire year will be organized on an individual basis with each student. At least three more lab periods per week will be provided for work on this requirement.

## 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.

Required Technician subjects or equivalent: B10a, B12b, or B14b  
C10a, C11b, MP10a, MP11b, and H10a,b

### FIRST ACADEMIC YEAR

| Semester A                             |          | Semester B  |          |
|--|----------|---|----------|
| Course No. and Name                    | Lec. Lab | Course No. and Name   | Lec. Lab |
| C40a Chemistry Laboratory Techniques I | 0 4      | C41b Chemistry Laboratory Techniques II                     | 0 2      |
| C42a Organic Chemistry                 | 3 4      | C43b Bio-Organic Chemistry                                  | 3 4      |
| C45a Qualitative Analysis              | 3 4      | C44b Instrumentation I                                      | 2 3      |
| C100a Chemistry (lecs only)            | 3        | C46b Quantitative Analysis                                  | 3 4      |
| MP40a Electrical Measurements          | 2 2      | MP41b Light & Optics  | 2 2      |
| MP100a Calculus                        | 3 0      | One approved elective from outside the Chemistry Department |          |

### SECOND ACADEMIC YEAR

| Semester A   |          | Semester B                                  |          |
|--|----------|---|----------|
| Course No. and Name  | Lec. Lab | Course No. and Name                         | Lec. Lab |
| C70a Instrumentation II                                      | 3 4      | C71b Instrumentation III                    | 3 4      |
| C74a Glass Blowing   | 0 4      | C73b Laboratory Organization and Management | 2 4      |
| C75a Food Chemistry I  | 3 4      | C76b Food Chemistry II                      | 3 4      |
| MP70a Statistics   | 3 0      | MP71b Computer Programming                  | 1 0      |
| One approved elective from outside the Chemistry Department. |          |   |          |

A Chemistry Project and Seminar Program lasting the entire year, will be organized on an individual basis with each student. From six to eight more laboratory periods per week will be provided for work on this requirement.

## 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.

Required Technician subjects or equivalent: B10a, B12b, or B14b  
C10a, C11b, MP10a, MP11b, and H10a,b

### FIRST ACADEMIC YEAR

| <b>Semester A</b>                 | <b>Lec.</b> | <b>Lab</b> | <b>Semester B</b>                  | <b>Lec.</b> | <b>Lab</b> |
|-----------------------------------|-------------|------------|------------------------------------|-------------|------------|
| <b>Course No. and Name</b>        |             |            | <b>Course No. and Name</b>         |             |            |
| AE11a Horticultural Engineering I | 0           | 3          | AE18b Horticultural Engineering II | 1           | 3          |
| B13a Plant Identification         | 2           | 2          | B40b Plant Pathology               | 2           | 3          |
| B43a Entomology                   | 2           | 2          | B41b Plant Physiology              | 2           | 2          |
| C12a Soil Physics                 | 2           | 2          | C13b Soil Chemistry                | 2           | 2          |
| PS45a Turf Production I           | 2           | 2          | PS46b Turf Production II           | 1           | 2          |
| PS50a Ornamental Horticulture I   | 2           | 4          | PS51b Ornamental Horticulture II   | 2           | 4          |
| PS54a Plant Propagation           | 1           | 2          |                                    |             |            |

### SPRING PROGRAM - Semester C

PS70c Landscaping Techniques - 6 weeks to be announced

### SECOND ACADEMIC YEAR

| <b>Course No. and Name</b>        | <b>Lec.</b> | <b>Lab.</b> | <b>Course No. and Name</b>             | <b>Lec.</b> | <b>Lab</b> |
|-----------------------------------|-------------|-------------|--|-------------|------------|
| AE14a Surveying                   | 1           | 2           | EB11b Applied Accounting & Taxation    | 2           | 2          |
| AE45a Soil & Water Management     | 2           | 2           | H140b Personnel Management             | 3           | 0          |
| AE59a Horticultural Machinery     | 2           | 2           | EB41b Business Law                     | 3           | 0          |
| EB10a Accounting                  | 2           | 2           | PS72b Ornamental Horticulture IV       | 3           | 6          |
| H120a Sociology I                 | 3           | 0           | PS74b Art & Design II                  | 3           | 0          |
| PS71a Ornamental Horticulture III | 3           | 6           | PS75b Ornamental Horticultural Project | 0           | 4          |
| PS73a Art & Design I              | 3           | 0           | PS77b Nursery & Landscape Crops        | 2           | 2          |

## COURSE IN 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 or Plant Science 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.

## 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.

### FIRST ACADEMIC YEAR

Four months of approved farm experience must be completed prior to September of the first academic year.

| Semester A                           |          | Semester B                                   |          |
|--------------------------------------|----------|--|----------|
| Course No. and Name                  | Lec. Lab | Course No. and Name                          | Lec. Lab |
| AE40a Field Machinery                | 2 2      | AE61b Farm Tractors                          | 2 2      |
| AS10a Livestock Production(ruminant) | 3 2      | AS12b Livestock Production<br>(non-ruminant) | 3 2      |
| EB10a Accounting                     | 2 2      | EB11b Applied Accounting and Taxation        | 2 2      |
| EB40a Marketing Practices            | 1 4      | EB220b Production Economics                  | 2 4      |
| EB240a Farm Management               | 3 2      | PS41b Field Crops Production II              | 2 2      |
| PS40a Field Crop Production I        | 2 2      |  |          |

Equivalent to six more courses from the list of approved electives.

### SUMMER AND SECOND YEAR

| Semester A  | Semester B   |                     |           |                               |     |                    |     |   |  |
|---|--|---------------------|-----------|-------------------------------|-----|--------------------|-----|---|--|
| On-Farm Training - * a seven month contract between April and January | <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Course No. and Name</th> <th style="text-align: center;">Lec. Lab.</th> </tr> </thead> <tbody> <tr> <td>EB42b Applied Farm Management</td> <td style="text-align: center;">1 4</td> </tr> <tr> <td>EB72b Farm Project</td> <td style="text-align: center;">0 4</td> </tr> <tr> <td colspan="2">Four more courses from the list of approved electives</td> </tr> </tbody> </table> | Course No. and Name | Lec. Lab. | EB42b Applied Farm Management | 1 4 | EB72b Farm Project | 0 4 | Four more courses from the list of approved electives |  |
| Course No. and Name   | Lec. Lab.  |                     |           |                               |     |                    |     |   |  |
| EB42b Applied Farm Management   | 1 4  |                     |           |                               |     |                    |     |   |  |
| EB72b Farm Project  | 0 4  |                     |           |                               |     |                    |     |   |  |
| Four more courses from the list of approved electives                 |  |                     |           |                               |     |                    |     |   |  |

### APPROVED ELECTIVES

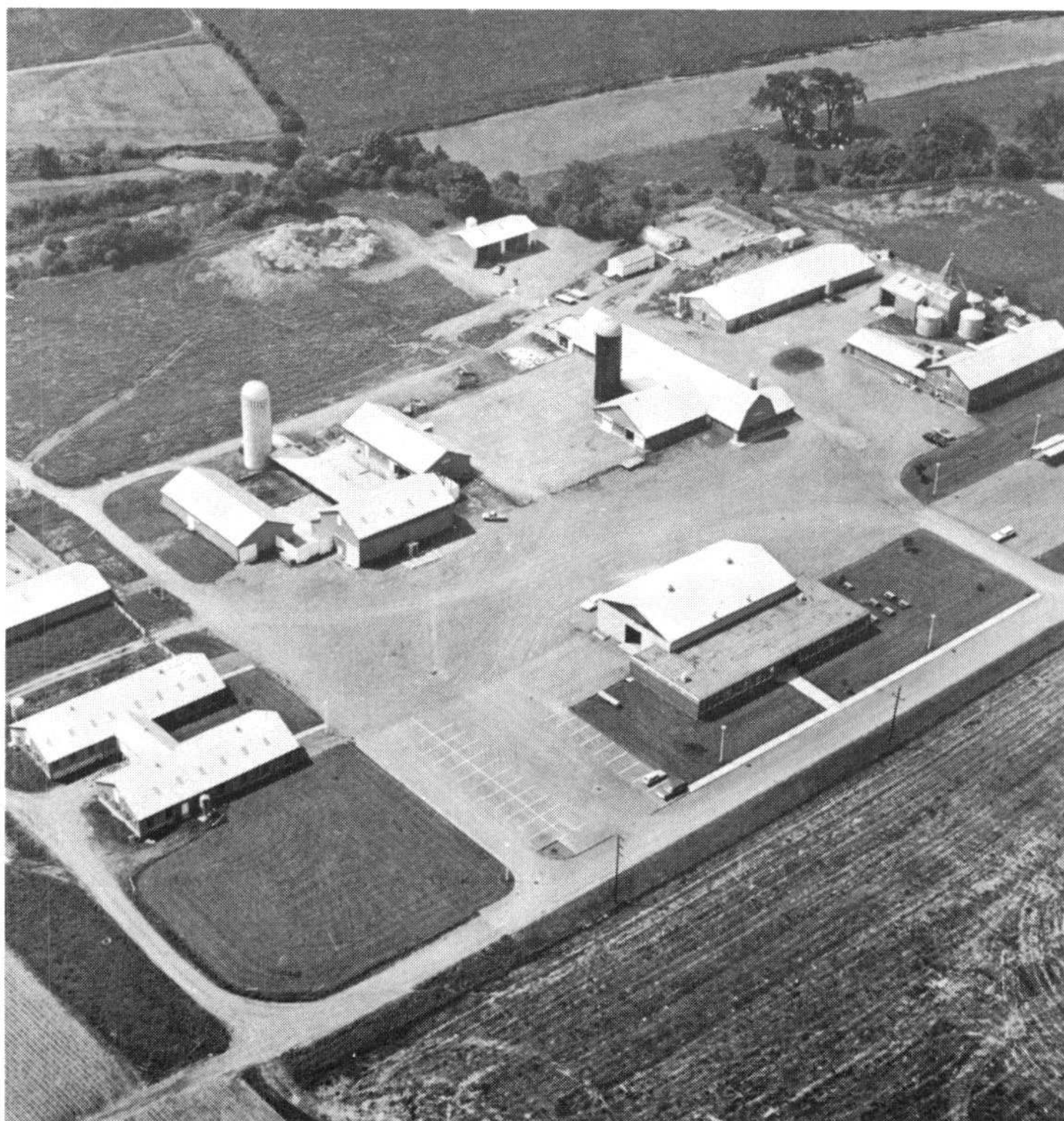
| Semester A                      | Semester B | Lec. Lab.                            |     |
|---------------------------------|------------|--------------------------------------|-----|
| Course No. and Name             | Lec. Lab   | Course No. and Name                  |     |
| AE13a Shopwork I                | 1 4        | AE20b Shopwork II                    | 1 4 |
| AS11a,b Animal Husbandry Skills | 0 2        | AE21b Oil Hydraulics I               | 2 2 |
| AS40a Feeds & Feeding           | 3 2        | AS44b Animal Breeding                | 3 0 |
| AS46a Animal Physiology         | 2 2        | AS47b Animal Pathology               | 2 2 |
| B43a Entomology                 | 2 2        | AS70b Animal Nutrition               | 3 0 |
| PS10a Plant Science Skills I    | 0 2        | B40b Plant Pathology                 | 2 3 |
| PS43a Berry Crop Production     | 1 2        | B41b Plant Physiology                | 2 2 |
| PS53a Vegetable Production      | 3 4        | PS11b Plant Science Skills II        | 0 4 |
| One Humanities Subject          |            | PS44b Tree Fruits                    | 1 2 |
|                                 |            | PS42b Cash Crops and Seed Production | 2 1 |
|                                 |            | PS49b Potato Production              | 2 2 |
|                                 |            | PS76b Crop Physiology                | 3 2 |

\*The student will be placed on a selected farm for seven months (May to December inclusive) of intensive farm training with the farm operator as instructor. Satisfactory levels of proficiency must be attained in a number of farm skills, and in the planning and management aspects of operating a farm. A comprehensive farm planning project is begun during this phase of the training program.

## Qualification for Diploma

Students who complete all the requirements with no mark below fifty per cent 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 eighty per cent and an honours diploma to one who has attained an average of at least seventy-five per cent.





# 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



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### **AE 10a: Agricultural Engineering I**

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

This is an introductory course in farm buildings. The lectures are on the farmstead and its utilities. Planning and farm safety are stressed. Utilities such as electricity usage, water sources and systems as well as sewage treatment is covered. Environmental requirements and control in farm buildings is introduced.

Laboratories consist mainly of tours of the farm building complex here at N.S.A.C. pointing out the engineering features involved. Drafting is introduced late in the term.

Fall semester - 2 lecs and 2 labs per week.

### **AE 11a: Horticultural Engineering I**

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

The basic skills of drafting are taught. Lettering, the use of drawing instruments, orthographic drawing and sketches in both pencil and ink are covered.

Fall semester - 3 labs per week.

### **AE 12a: Drafting I**

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

A course which helps the student develop his skills in lettering, orthographic drawings and sketching by the use of drawing instruments, drafting machines, printing aids, etc.

Fall semester-4 labs per week.

### **AE13a: Shopwork I**

Instructors: **Messers. Burr, Hampton, Morash and Mitchell**

The selection, operation and maintenance of work shop tools including the power grinder, drill press, fly press, metal band saw, iron worker, metal bender, squaring shears, box and pan brake and forming rolls; also use of portable wood and metal working 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

## **AGRICULTURAL ENGINEERING**

on the hard-to-weld metal such as aluminium and magnesium alloys. Identification and heat treatment of metals are also studied.

Fall semester - 2 lecs and 4 labs per week.

### **AE 14a: Surveying**

Instructors: **Prof. MacAulay and Mr. Taylor**

An introduction to surveying methods including field practice using tapes, levels and transits. Standard field notes are emphasized. Basic construction surveying is also introduced.

Fall semester - 1 lec and 2 labs per week.

Text: Kissam, SURVEYING PRACTICE (latest edition)

### **AE 17b: Agricultural Engineering II**

Instructors: **Prof. Townsend and Messrs. Burr and Morash**

Prerequisite: **AE 10**

Insulation, ventilation and proper temperature control in farm buildings is discussed. Lectures also include the parts of the structure from the foundation to the roof, concrete construction, wood construction, and use of metals in building construction. The soil and water field is introduced by reference to land clearing, open drainage, under drainage, and land reclamation as well as erosion control. Laboratories consist of drafting exercises in printing and drawing by the orthographic, oblique and isometric methods along with sketching.

Winter semester - 2 lecs and 2 labs per week.

### **AE 18b: Horticultural Engineering II**

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

Prerequisite: **AE 11**

Pictorial drawings, the use of symbols, drafting aids and topographical mapping are practiced. Lectures include various ways of computing land areas, quantities of fill used for land shaping, the principles of mixing, placing and

## AGRICULTURAL ENGINEERING

curing of concrete, the use of iron and wood for fences, furnishings, and walks with emphasis on durability.

Winter semester - 1 lec and 3 labs per week.

### **AE 19b: Drafting II**

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

Prerequisite: **AE 12a**

A continuation of drawing including pictorial drawings and sketches, sections and developments, farm building plans using printing machines, tracing tables, and planimeters.

Winter semester - 4 labs per week

### **AE 20b: Shopwork II**

Instructors: **Messers. Burr, Hampton, Morash and Mitchell**

Prerequisite: **AE 13**

Individual projects are undertaken by students, using the skills acquired in AE 13a. These projects are selected by the student and may be of metal or wood or a composite utilizing the shop equipment and machinery in the metal working, welding, and woodworking shops. Projects will be agriculturally orientated.

Winter semesters - 2 lecs and 4 labs per week.

### **AE 21b: Oil Hydraulics I**

Instructors: **Prof. MacAulay and Mr. Taylor**

A study of liquids at rest and in motion and the flow of liquids through pipes and orifices. Volumes and pressure measurements are made and hydraulic pump operation (both water pumps and industrial hydraulic pumps) is studied.

Winter semester - 2 lecs and 2 labs per week.

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### **AE 22b: Engineering Principles**

**Instructor: Prof. MacAulay**

An applied mechanics course providing a basic understanding of weights, forces, moments, and pressures as applied to frames and machines. Force, torque, power, and horsepower as applied to power sources and uses are studied. The use of common engineering materials and shapes as applied to simple machines and structures is introduced.

Winter semester - 3 lecs per week.

### **AE 23c: Farm Equipment Servicing**

**Instructors: Agricultural Engineering Department Staff**

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.

### **AE 40a: Field Machinery**

**Instructors: Prof. Clark and Mr. Hampton**

An introduction to the operation, maintenance and selection of farm machinery used in modern agriculture. Tillage, application, and harvesting equipment will be studied.

Fall semester - 2 lecs and 2 labs per week.

### **AE 41a: Farm Buildings I**

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

Construction of building elements will be studied, calculations and drawings will be made and costs considered. Measuring and drawings will be made and costs considered. Measuring and drawing of existing buildings and planning and drawing of proposed livestock, crop or service buildings will be carried out. Environment considerations will be studied with calculation of insulation values.

Fall semester - 2 lecs and 4 labs per week

Text: CANADIAN FARM BUILDING CODE

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### **AE 42a: Farm Power I**

Instructors: **Messrs. Taylor and Burr**

The types, functions, selection, and care of farm diesel and gasoline engines are studied. The safe use of power and hand tools as well as farm power shop equipment is emphasized.

Fall semester - 2 lecs and 4 labs per week.

### **AE 43a: Farm Machinery I**

Instructors: **Prof. Clark and Mr. Hampton**

This course is designed to provide an insight into the selection and care of tillage, application and harvesting equipment. The cost of owning and operating modern field machinery systems is investigated.

Fall semester - 2 lecs and 4 labs per week.

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

### **AE44a: Welding I**

Instructors: **Messrs. Burr and Hampton**

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, electrodes, welding joint design, hard surfacing, and electric arc welding machine construction are investigated.

Fall semester - 4 labs per week

### **AE 45a: Soil and Water Management**

Instructors: **Prof. MacAulay and Mr. Taylor**

An introduction to soil and water engineering including land drainage, irrigation systems, water storage structures, erosion control, land clearing, rudimentary hydrology, and other associated topics. Laboratory periods cover observations, measurements and elementary design problems.

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Fall semester - 2 lecs and 2 labs per week.

Text: Schwab, Frevert, Barnes, and Edminister,  
ELEMENTARY SOIL AND WATER ENGINEERING.

### **AE 46a: Oil Hydraulics II**

Instructor: **To be announced**

Prerequisite: **AE 21**

A study of power transmission by hydraulic systems as applied to mobile agricultural equipment is carried out. Typical tractor, open centered, closed centered, and pilot operated hydraulics systems, hydrostatic transmission, power steering, hydraulic motors and other accessories are studied. Techniques of testing, repairing and maintaining systems are covered.

Fall semester - 1 lec and 4 labs per week.

### **AE 47a: Projects**

Instructors: **Agricultural Engineering Department Staff**

This is an opportunity to examine in detail specific agricultural topics of interest to the students. The use of knowledge and skills acquired in courses related to the topic may be incorporated into the project plan. Approved projects will be carried out by the student under the supervision of selected staff members.

Fall semester - equivalent to 2 labs per week.

### **AE 48a: Shop Management**

Instructor: **To be announced**

Shop organization, responsibilities, communication with customers and employees as well as the efficient utilization of resources are covered. Work orders, warranty claims, pre-delivery and follow-up procedures are studied.

Fall semester - 2 lecs and 2 labs per week.

### **AE 49a: Electrical Systems**

Instructor: **To be announced**

General D.C. wiring and trouble shooting using modern test equipment is studied. Generators, starters, alternators, and other electrical components of an engine will be studied in theory and that theory will be applied to actual operating conditions.

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Fall semester - 1 lec and 3 labs per week.

### **AE 50a: Equipment Overhaul I**

Instructor: **To be announced**

In this course several types of machines are repaired but before any reconditioning begins the student will provide a list of parts required. The cost of these parts and labour are discussed relative to economic feasibility of doing the reconditioning. The work is then done under supervision and the performance of the machine is evaluated under field conditions.

Fall semester - 8 labs per week.

### **AE 51b: Farm Buildings II**

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

Prerequisite: **AE 41**

The study of buildings carried out in Farm Buildings AE 41a will be continued with emphasis on structural and functional design. Selection of roof trusses and beams will be considered, heat loss calculations made and Materials Handling in farmsteads studied. Model buildings or information panels on a specific subject will be designed, drawn and constructed.

Winter semester - 1 lec and 4 labs per week

Text: **CANADIAN FARM BUILDING CODE**

### **AE 52b: Farm Power II**

Instructors: **Messrs. Taylor and Hampton**

Prerequisite: **AE 42**

Trouble-shooting with test equipment is studied. Maintenance and repair of small engines is covered. The principles of operation and the care of the tractor power train are emphasized.

Winter semester - 1 lec and 4 labs per week.

### **AE 53b: Farm Machinery II**

Instructors: **Prof. Clark and Mr. Hampton**

Prerequisite: **AE 43**



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An intensive study of the operational characteristics and maintenance of machinery used on modern farms. Extensive use will be made of selected manuals and agricultural engineering literature.

Winter semester - 1 lec and 4 labs per week

### **AE 54b: Welding II**

Instructor: **To be announced**

Prerequisite: **AE 44**

Oxyacetylene, electric arc and spot welding equipment is studied in detail. Included in the demonstrations and practice are 3 position welding, electrode selection, welding joint design for ferrous and non-ferrous metals. Determining the strength of any weld can be accomplished by use of modern testing machine.

Winter semester - 1 lec and 4 labs per week.

### **AE 55b: Materials Handling Equipment**

Instructor: **Prof. Cunningham**

The operating characteristics and maintenance of all types of materials handling equipment used around the farmstead from the milker to the silo unloader to the gutter cleaner are studied. Laboratory work will include trouble shooting and the reconditioning of available farmstead equipment.

Winter semester - 2 lecs and 4 labs per week.

### **AE 56b: Tractor Overhaul**

Instructor: **To be announced**

A diagnosis of the faulty tractor system is carried out. Complete overhaul including cylinder boring, bearing fitting, clutch adjustment, etc. are covered. Cost of repairs are estimated before repairing begins and actual costs are tabulated.

Winter semester - 8 labs per week.

### **AE 57b: Equipment Overhaul II**

Instructor: **To be announced**

Prerequisite: **AE 50**

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This course is a continuation of AE 50a during which the student is encouraged to improve his proficiency in reconditioning and evaluating the performance of many types of equipment.

Winter semester - 8 labs per week

### **AE 58b: Electrical Controls**

Instructors: **Prof. Townsend and Messrs. Burr, Hampton and Morash**

This is a study of electrical controls and various types of switches such as limit, micro, mercury, remote control, photoelectric, etc. The application of temperature and humidity controls for plant and animal environment is studied.

Winter semester - 1 lec and 4 labs

### **AE59a: Horticultural Machinery**

Instructors: **Profs. Clark and MacAulay, Messrs. Taylor and Hampton**

An introduction to the selection and proper operation of horticultural machinery used by the ornamental and landscape horticulturalist. Tillage, application, lawn and ornamental maintenance equipment, small internal combustion engines as well as the principles of hydraulics will be studied.

Fall semester - 2 lecs and 2 labs per week.

### **AE 60b: Inventory Control**

Instructor: **To be announced**

Different methods of controlling the inventory of parts and machines are studied. Procedures for ordering parts and machines are investigated.

Winter semester - 2 lecs per week

### **AE 61b: Farm Tractors**

Instructors: **Messrs. Taylor and Hampton**

An introduction to the principle of operation of the gasoline and diesel engine is studied and practiced. This includes parts identification, assembly procedure and servicing.

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Winter semester - 2 lecs and 2 labs per week.

### **AE 62b: Properties of Materials**

Instructor: **Prof. Adams and Messrs. Burr and Morash**

The characteristics, requirements and selection of various materials including metals, plastics, lumber and concrete are studied and the standards and tests applied to these materials considered. The reaction of materials to various conditions of use including loading are investigated.

Winter semester - 1 lec and 2 labs per week.

### **AE 100a: 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 105b: Graphics and Design**

Instructor: **Prof. Adams**

Prerequisite: **AE100**

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.

Winter semester - 1 lec and 4 labs per week.

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

### **AE 110a: Statics**

Instructor: **Profs. J. T. MacAulay and D. A. Browning**

A course dealing with forces acting on bodies at rest in two and three dimensions. Concepts of equilibrium and

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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 120b: **Dynamics**

Instructor: **Prof. J.D. MacAulay**

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 220b: **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.

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

### AE 225a: **Thermodynamics**

Instructor: **Prof. J. T. MacAulay**

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;

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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 Sonnatog, **FUNDAMENTALS OF CLASSICAL THERMODYNAMICS**;  
Wiely and Mark; Thermodynamics, Prentice Hall

### **AE 230b: Agricultural Mechanization**

Instructors: **Prof. Clark and Mr. Hampton**

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 - 1 lec and 2 labs per week.

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

### **AE 240a: Material Science**

Instructor: **To be announced**

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: To be announced

### **AE 245b: Strength of Materials**

Instructor: **Prof. Saxon**

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

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loading, deflection of beams and shafts, torsional loading, combined loadings.

Winter semester - 3 lecs and 2 labs per week.

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

### **AE 250b: Fluid Mechanics**

Instructor: **Prof. J. T. MacAulay**

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

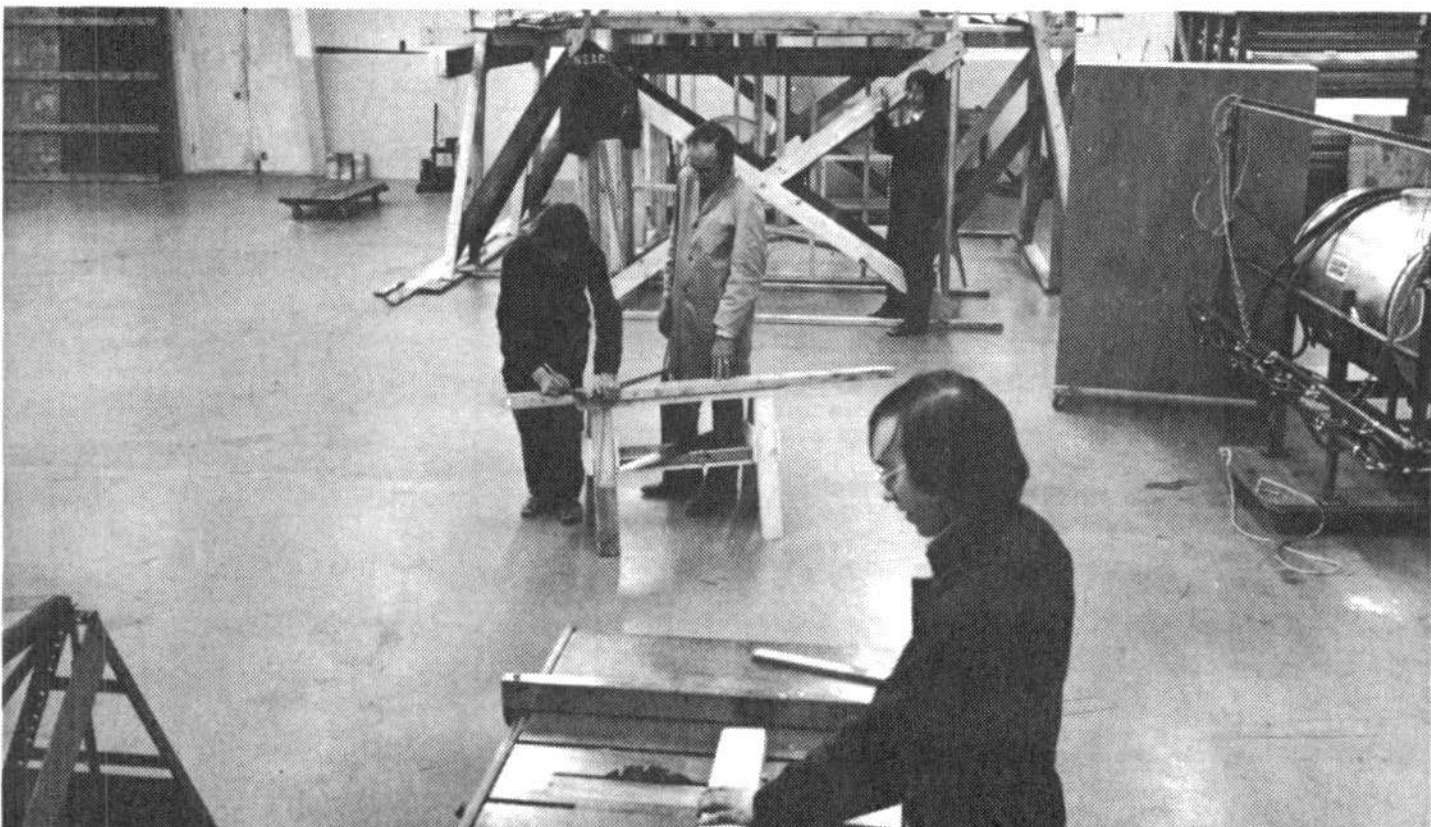
### **AE260c: Surveying**

Instructor: **Prof. J.T. MacAulay**

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

2 weeks following the winter semester

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



## **ANIMAL SCIENCE**

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### **AS 10a: Livestock Production [ruminant animals]**

Instructor: **Prof. Curtis**

An introduction to the production of dairy cattle, beef cattle and sheep. The course will emphasize management of commercial enterprises of each of these three phases of animal agriculture.

Fall semester - 3 lecs. and 2 labs per week.

### **AS 11a,b: Animal Husbandry Skills**

Instructor: **Prof. Mathewson**

Practical experience in the handling of animals and related equipment. In addition to the formal laboratory periods, students will be assigned to participate in the activities of the various animal units.

Winter semester - 2 labs per week.

### **AS 12b: Livestock Production [non-ruminant animals]**

Instructors: **Profs. Crober and Hamilton**

An introduction to the production of poultry and swine with lesser time allotment to horses and laboratory animals. The course will emphasize the management of commercial enterprises of poultry and swine.

Winter semester - 3 lecs and 2 labs per week.

### **AS 40a: Feeds and Feeding**

Instructor: **Prof. Cock**

This is a study of the various commonly used feedstuffs with respect to their nutrient content and feeding value. The nutrient requirements of farm livestock and the balancing of rations to meet growth, production, and reproduction needs are covered.

Fall semester - 3 lecs and 2 labs per week.

**AS41a: Milk and Dairy Products**

Instructor: **Prof. Chant**

Studies in the composition and properties of milk and its products with consideration of the processes of pasteurization, homogenization and quality control.

Fall semester - 2 lecs and 2 labs per week

**AS 42a: Breeds and Selection**

Instructor: **Prof. Mathewson**

A study of the history of livestock selection and a consideration of the present breeds. Laboratory periods will emphasize live animal appraisal and a familiarization with common livestock breeds and strains.

Fall semester - 1 lec and 2 labs per week

**AS 43b: Meat and Livestock Products**

Instructors: **Profs. Curtis and Crober**

The basic science of meat, wool and eggs with emphasis on their marketing and processing for retail consumption.

Winter semester - 2 lecs and 2 labs per week.

**AS 44b: Animal Breeding**

Instructor: **Prof. Mathewson**

In this course the theoretical and practical application of inheritance in the breeding and selecting of animals is studied.

Winter semester - 3 lecs per week

**AS 45b: Animal Science Seminar**

Instructors: **Animal Science Staff**

Students will meet weekly to report on and discuss Animal Science related topics. Students will be encouraged to report on their projects.

Winter semester - 1 lec per week



## **ANIMAL SCIENCE**

### **AS 46a: Animal Physiology**

Instructor: **Prof. Crober**

This course considers the fluids of the body, circulation, respiration, digestion, absorption, excretion, energy exchange, muscular activity, neurology, endocrinology and reproduction of domestic animals.

Fall semester - 2 lecs and 2 labs per week

### **AS 47b: Animal Health**

Instructor: **Prof. Main**

Systems of sanitation and hygiene. Promotion of animal health. Causes, signs, prevention, and control of common diseases of livestock are discussed.

Winter semester - 2 lecs and 2 labs per week.

### **AS 48a,b: Projects**

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.

Both semesters - Time to be arranged

### **AS 70b: Animal Nutrition**

Instructor: **Prof. Cock**

A study of the principles of the nutrition of animals. Emphasis is given to the needs and utilization of specific nutrients. Some discussion will be related to current research reports.

Winter semester - 3 lecs per week.

Text: Maynard and Loosli, ANIMAL NUTRITION

### **AS 100b: Introductory 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 210a: Selected Studies in Animal Science**

Instructors: **Animal Science Staff**

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

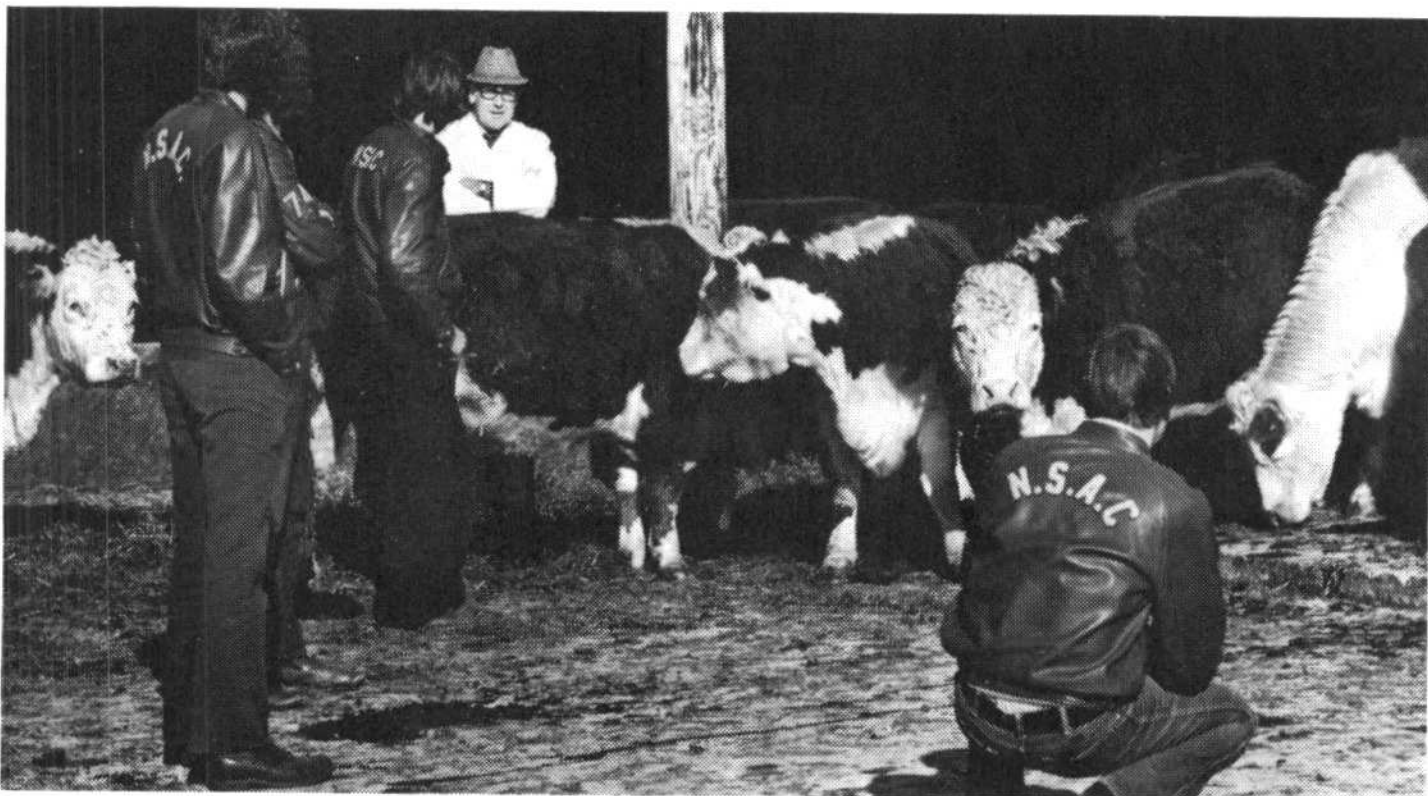
### **AS 220a: Animal Production Methods**

Instructor: **Animal Science Staff**

The management of cattle, sheep, swine, and poultry will be discussed. An overview of the industry will be presented. Emphasis will be on operational practice.

Fall semester - 2 lecs and 2 labs per week

Text: To be announced



# **BIOLOGY**



**B 10a: Principles of Biology**  
**Instructor: Prof. Eaton**

An introduction to the biological principles that are most important in agriculture. Topics include the structure, growth and reproduction of both plants and animals, and an introduction to genetics and ecology.

Fall semester - 3 lecs and 4 labs per week

**B 12b: Biology****Instructor: Prof. Eaton**

A course stressing biological principles important to the study of plants. Plant structure and function, genetics and breeding, as well as pollution and human disease will be discussed.

Winter semester - 2 lecs and 4 labs per week

**B 13a: Plant Identification****Instructor: Prof. Prange**

A course covering the classification and naming of plants with special attention given to our common species including the weeds, trees, shrubs, and grasses. The important plant families will be considered, along with laboratory work in identification.

Fall semester - 2 lecs and 2 labs per week.

**B 14b: Biology****Instructor: Prof. Eaton**

A course stressing biological principles important to the study of animals in agriculture. Topics will include vertebrate anatomy, histology, function of the different systems, genetics, animal breeding, as well as human diseases and effects of pollution.

Winter semester - 2 lecs and 4 labs per week

**B 40b: Plant Pathology****Instructor: Prof. McFadden**

An introduction to the nature, cause and control of plant disease due to bacteria, fungi, nematodes, viruses and mycoplasmas. Emphasis will be placed on the infection process, resistance mechanisms, relation of environment to disease development, and methods of control. Emphasis is placed on representative diseases affecting economic crops in the Atlantic region.

Winter semester - 2 lecs and 3 labs per week.

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### **B 41b: Plant Physiology** Instructor: **Prof. Prange**

A course dealing with the structure of plants and how they live, grow and reproduce. The various plant processes such as photosynthesis, respiration, absorption, nutrition, transpiration and growth are included, along with a study of the various factors that influence the growth and economic production of crops.

Winter semester - 2 lecs and 2 labs per week

### **B 42b: Laboratory Practices I** Coordinator: **Prof. Porth**

Methodology involved in the feeding and handling of animals commonly used in laboratory experiments; principles and techniques related to photography, including camera types, light meters, film, printing, enlarging and microscope photography; the culture and care of plants used in botany, including the use of pesticides; culture of the fruit fly *Drosophilla* spp. for genetics experiments.

Winter semester - 2 lecs and 3 labs per week

### **B 43a: Entomology** Instructor: **Prof. Prange**

This course deals with the economic aspects of insects and other animal type pests common to the Atlantic Provinces. Structure, growth, reproduction, distribution and other factors involving control are considered.

Fall semester - 2 lecs and 2 labs per week

### **B 70a: Microtechniques I** Instructor: **Prof. Crosby**

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

Fall semester - 2 lecs and 4 labs per week.

**B 71b: Microtechniques II**Instructor: **Prof. Crosby**Prerequisite: **Microtechnique I**

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

Winter semester - 2 lecs and 4 labs per week.

**B 72a: Laboratory Practices II**Coordinator: **Prof. Porth**

This course consists of the collection, preparation, classification and control of field and greenhouse insects; the procedures and techniques involved in ecological field studies including a major collection from aquatic or terrestrial environments; the principles, operation and care of laboratory instruments and equipment.

Fall semester - 2 lecs and 3 labs per week

**B 73b: Microbiology**Instructor: **Prof. Porth**

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 to water, soil, the food industry, and diseases of animals and man. Laboratory work will stress the principles of staining, preparation of microbiological media, culturing and biochemical tests.

Winter semester - 3 lecs and 3 labs per week

**B 090a: Principles of Biology**Instructor: **Prof. Eaton**

An introduction to the biological principles that are most important in agriculture. Topics include the structure,

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growth and reproduction of both plants and animals, and an introduction to genetics and ecology.

Fall semester - 3 lecs and 4 labs per week

### **B 100a: 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.

### **B 110a,b: The Animal Kingdom**

Instructor: **Prof. Prange**

A review of the animal kingdom with reference to the structure and biology of the Protozoa and various metazoan phyla; important aspects of entomology, animal parasitism, life histories, elements of vertebrate embryology, animal ecology and evolution.

Both semesters - 3 lecs and 4 labs per week.

### **B 200a: Cell Biology**

Instructor: **Prof. Porth**

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.

**B 205b: Histology****Instructor: Prof. Crosby**

An introduction to general histology. The fine structure of cells and microscopical anatomy of tissues are discussed. Details of cell structure and tissue organization are studied in the laboratory with emphasis on light microscope recognition and interpretation of electron micrographs.

Winter semester - 2 lecs and 4 labs per week.

**B 210a: Embryology****Instructor: Prof. Crosby**

A study of the developmental patterns exhibited by vertebrates together with an analysis of the casual interrelationships of the developmental process.

Fall semester - 3 lecs and 4 labs per week

**B 220a: Microbiology for Engineers****Instructors: Prof. Porth**

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 microorganisms in areas of agricultural technology such as food, milk, silage, livestock waste management, enzymes and fermented beverages. The role of microorganisms in nitrogen fixation, ruminant digestion, antibiotic production, petroleum prospecting and material spoilage, will be discussed.

Fall semester - 3 lecs per week.

**B 225b: Microbiology****Instructor: Prof. Porth**

A general introduction to microbiology. Topics include history, morphology, structure, cultivation, reproduction, metabolism, genetics, classification and control of microorganisms. The importance of microorganisms to soil



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productivity, foods, industry, veterinary science, public health and sanitation will be discussed.

Winter semester - 3 lecs and 3 labs per week.

### **B 240a: 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 245b: Agricultural Genetics**

Instructor: **Prof. Padmanathan**

Prerequisite: **B 240a**

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 260b: Plant Physiology**

Instructor: **Prof. Eaton**

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

Winter semester - 3 lecs and 2 labs per week.

### **B 270a: Ecology**

Instructor: **Prof. Eaton**

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 - 2 lecs and 2 labs per week.

## CHEMISTRY

### C 10a: **Chemistry I**

Instructor: **Prof. Hawley**

A course that stresses fundamental concepts of Chemistry in relation to the Agricultural industry. Topics discussed include S.I. System, properties of matter and energy, basic atomic structure, Periodic Table, bonding, electronic arrangements, basic reactions and problem solving. The properties of some specific elements such as nitrogen, sulfur, phosphorus, and iron will be related to the Agricultural industry.

Fall semester - 2 lecs and 2 labs per week

Text: To be selected

Laboratory manual and course outline provided.

### C 11b: **Chemistry II**

Instructor: **Prof. Hawley**

Prerequisite: **C 10**

Specific topics to be discussed include solutions, electrochemistry and corrosion, metallurgy, agricultural alloys, commercial fertilizer preparations, water, water softening, radioactive isotopes, sewage disposal, explosives, fuels. An introduction to some practical organic and biochemistry is included. Some specific materials will be examined and the safety precautions involved in their proper use in the home, shop, farm and lab will be stressed.

Winter semester - 2 lecs and 2 labs per week

Text: To be selected

Laboratory manual and course outline provided

## **CHEMISTRY**

### **C 12a: Soil Physics**

Instructor: **Prof. Langille and Mr. Higgins**

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 - 2 lecs and 2 labs per week.

Text and laboratory manual: To be selected

### **C 13b: Soil Chemistry**

Instructor: **Prof. Langille and Mr. Higgins**

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 - 2 lecs and 2 labs per week

Text and laboratory manual: To be selected

### **C 40a: 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 41b: 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 42a: 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 hydro-carbons, 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

## CHEMISTRY

### **C 43b: 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 44b: Instrumentation I**

Instructor: **Profs. MacLean, Robinson and Miss Wheatley**

An introduction to the theory and practical basic skills of 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 45a: 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 46b: 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: Gilreath, ELEMENTARY QUANTITATIVE CHEMISTRY

## **C 70a: Instrumentation II**

Instructor: **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 spectrograph, 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 71b: Instrumentation III**

Instructor: **Prof. MacLean**

A continuation of the study of the theory and practical techniques of electrochemistry followed by a study of

## **CHEMISTRY**

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

Text: James W. Robinson, UNDERGRADUATE INSTRUMENTAL ANALYSIS

### **C 73b: Laboratory Organization and Management** Instructor: **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 reporting of analytical results is studied. Specifically arranged for Chemistry Laboratory Technologist 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

### **C 74a: 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

### **C75a: Food Chemistry I** Instructor: **Prof. Robinson** Prerequisites: **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

### **C76b: 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

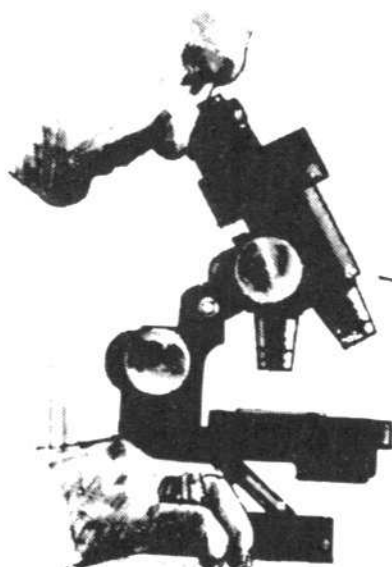
### **C 100a: Chemical Principles**

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  
(Third edition)





## **CHEMISTRY**

### **C 110b: 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 120a: Engineering Chemistry I**

**Instructor: Prof. MacLean**

A study of solid, liquid and gaseous fuels, nuclear power, atmospheric pollution, lubrication and lubricants, brake fluid and antifreeze and the chemistry of their application to engineering problems.

Fall semester - 3 lecs and 4 labs per week

Text: Munroe, CHEMISTRY IN ENGINEERING

### **C 125b: Engineering Chemistry II**

**Instructor: Prof. MacLean**

**Prerequisite: C 120**

A study of the engineering topics; rust and corrosion, plastics, elastomers, protective coatings, uses and requirements of domestic and industrial water, sewage disposal and explosives.

Winter semester - 3 lecs and 4 labs per week

Text: Munroe, CHEMISTRY IN ENGINEERING

**C 200a: Biochemistry I**

Instructor: **Prof. MacConnell**

Prerequisite: **C110**

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: To be announced

**C 205b: Biochemistry II**

Instructor: **Prof. MacConnell**

Prerequisite: **C 200**

This course includes a study of the following topics: enzyme 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: To be announced

**C 220a: Introduction to Soil Science**

Instructor: **Prof. Langille**

Prerequisite: **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 as related 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: Millar, Turk, and Foth, **FUNDAMENTALS OF SOIL SCIENCE** (Fourth edition)

# **ECONOMICS AND BUSINESS**

## **EB 10a: 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 - 2 lecs and 2 labs per week

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

## **EB 11b: 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 - 2 lecs and 2 labs per week

## **EB 12a: Macro Economics**

Instructor: **Prof. Tait**

An introduction to the study of Macro Economics in a Canadian context. Topics covered include: national accounts, public finance, money and banking, and international trade. Current problems in the Canadian Economy are drawn on to emphasize the theory.

Winter semester - 3 lecs per week

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

### **EB 13b: 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.

Fall semester - 3 lecs per week

### **EB 40a: Marketing Practices**

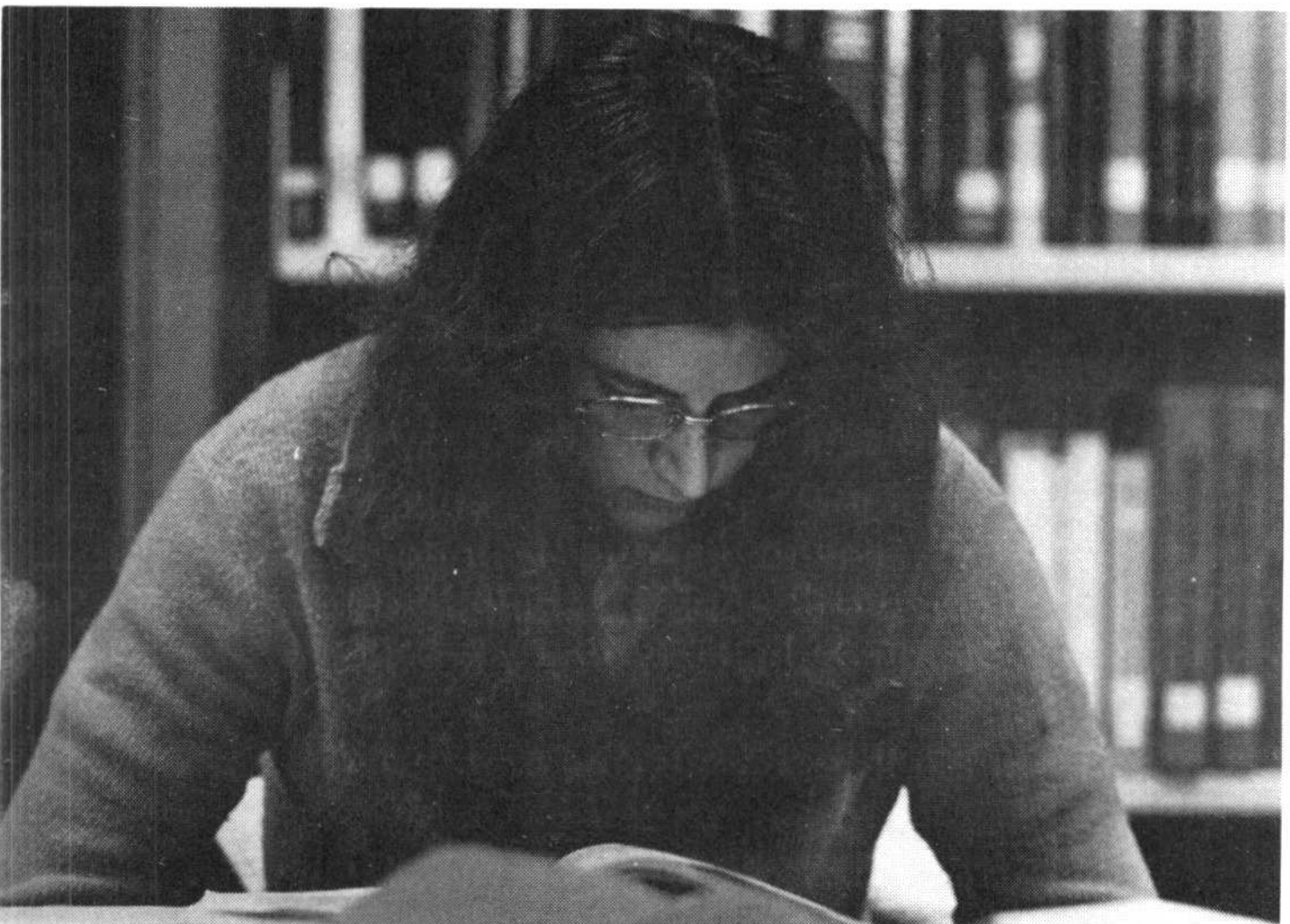
Instructor: **Prof. Ells**

The current practices involved in marketing farm products produced in the Atlantic Region are studied. The conditions 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 - 1 lec and 4 labs per week.



## **ECONOMICS AND BUSINESS**

### **EB 41b: 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 42b: 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 - 1 lec and 4 labs per week

### **EB 43a,b: Projects**

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.

### **EB 70a: Farm Planning**

Instructor: **Prof. Stackhouse**

This course is designed to examine selected areas in farm management. While emphasis is placed on the financial aspects of farm management, areas of marketing and production will also be examined in relation to the decision making process.

Specific topics include: evaluation of the legal forms of the farm entity; concepts of risk and uncertainty in farm planning; farm diversification; the farmer and the futures market; forward contracting; lease versus purchase decisions for fixed assets; estate planning and the use of computerized farm planning packages in decision making.

Fall semester - 2 lecs and 2 labs per week

### **EB 71b: Market Planning**

Instructor: **Prof. Arnfast**

Prerequisite: **EB 70**

The emphasis of this course will be the application of marketing principles to the marketing of agricultural products. The following topics will be discussed: marketing concept, consumer behavior, marketing process, middle-man, facilitating agencies, co-operatives, marketing boards, physical distribution, promotion, pricing.

Winter semester - 2 lecs and 2 labs per week

### **EB 72b: 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 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 - 4 labs per week

## **ECONOMICS AND BUSINESS**

### **EB 100b: Economics of Agriculture**

Instructor: **Prof. Stackhouse**

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 lec per week

### **EB 200a: Principles of Economics-Micro**

Instructor: **Prof. Stackhouse**

This course introduces the principles of microeconomic 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 210a: Accounting**

Instructor: **Prof. Arnfast**

This is a study of the basic principles and procedure relevant 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 220b: Production Economics**

Instructor: **Prof. Stackhouse**

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 re-enforce the concepts presented in the classroom.

Winter semester - 2 lecs and 4 labs per week.

### **EB 230a: Principles of Marketing**

Instructor: **Prof. Arnfast**

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 240a: 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 3 labs per week.



## **ECONOMICS AND BUSINESS**

### **EB 250b: Macro Economics**

Instructor: **Prof. Tait**

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

Text: Archer, **INTRODUCTORY MACROECONOMICS: A CANADIAN ANALYSIS**

### **EB 260b: Quantitative Economics**

Instructor: **Prof. Stackhouse**

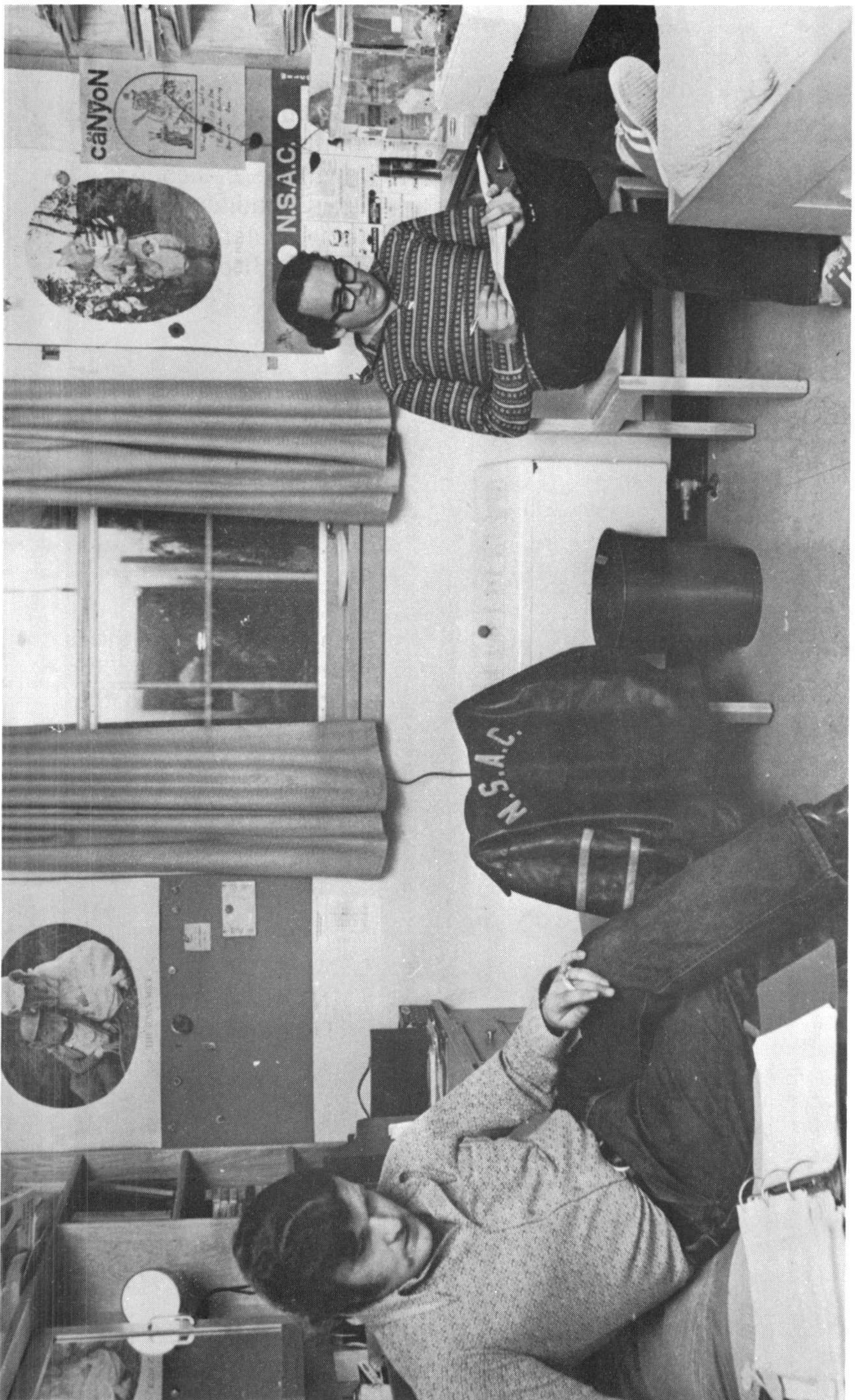
Prerequisites: **MP105, EB100, EB210**

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: 1. Elements of Mathematical Economic 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

Text: Chiang, Alpha C., **FUNDAMENTAL METHODS OF MATHEMATICAL ECONOMICS**



## HUMANITIES

# HUMANITIES

### **H 05: Physical Education**

This is an elective program of life long activities offered and open to all interested students. These activities include tennis, golf, swimming, equestrian training, cross-country skiing, badminton and curling.

### **H 10a,b : 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.

Both semesters - 3 lecs per week

### **H 11b: Modern Literature [Opt.]**

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 - 3 lecs per week

### **H 12b: Leadership Development**

Instructor: **To be announced**

A course designed to assist students in developing discussion 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 avoid waste of time, money, materials, equipment and human resources. The role of community and agricultural organizations in initiating change is also considered.

|                            |         |
|----------------------------|---------|
| Winter semester - 1st year | 1 week  |
| 2nd year                   | 1 week  |
| Total length of course     | 2 weeks |

### **H 70a: Typing**

Instructor: **Mrs. Hayman**

Mastery of the typewriter keyboard; development of speed and accuracy in typing and other typing skills to be integrated and applied to realistic production problems.

Fall semester - 2 lecs and 2 labs per week

### **H 71b: Office Practices and Business Machines**

Instructor: **Mrs. Hayman**

Preparation of business letters, office forms, papers, business documents; filing; calculator keyboard; duplicating machines. Application of these skills will be useful in future work.

Winter semester - 2 lecs per week

### **H 120a: 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.

## HUMANITIES

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, J.R., SOCIOLOGY CONCEPTS AND CHARACTERISTICS; Stern, R.M., THE TOWER, Benchley, P., JAWS; Kesey, K., ONE FLEW OVER THE CUCKOO'S NEST.

### H 125b: **Sociology II**

Instructor: **Prof. MacEachern**

An examination of society will be undertaken with emphasis on man and community through consideration of human values, morals and decision making.

Winter semester - 3 lecs per week

Texts: Frankl, V., MAN'S SEARCH FOR MEANING; Lifton, R. J. and Olson, E., LIVING AND DYING; McKee, M. Robertson, SOCIAL PROBLEMS

### H 140a,b: **Personnel Management**

Instructor: **Prof. MacLeod**

Through lectures, assigned readings and case studies, students are introduced to the basic concepts of personnel management. Emphasis is placed on the management of human resources as it applies to small and medium-sized business organizations.

Both semesters - 3 lec per week

Texts: Reber and Terry, BEHAVIORAL INSIGHTS FOR SUPERVISION  
Rohrer, Hibler & Repogle, MANAGING THROUGH INSIGHT

### H 150b: **History of Agriculture**

Instructor: **Prof. Lynch**

A study of the development of agriculture from its earliest beginnings to the present day, with special emphasis on the

effects these developments have had on the history of mankind.

Winter semester - 2 lecs per week



### **H 200a: 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 205b: 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.

## **MATHEMATICS AND PHYSICS**

Ringuet, Aguin, O'Hagan, Atwood, and Buckler have been used. Students must write a major term paper.

Winter semester - 3 lecs per week.

### **H 210b: Communications and Extension Methods**

Instructor: **Prof. Burt**

A study of the principles and methods of extension work. The course will include rural sociology, program development, leadership training and communication skills. Emphasis will be placed on acquainting the student with the methods used in carrying out extension programs. Considerable attention will be given to the area of effective communication associated with extension programs.

## **MATHEMATICS AND PHYSICS**

### **MP 10a: Agricultural Mathematics I**

Instructor: **Prof. Buckler**

The mathematics program for technicians is one in which mathematical concepts are applied to problems in agriculture. The topics for Part I of the course are mathematical operations, percentage, linear and simultaneous equations, quadratic equations, exponents, logarithms, math of finance, ratio, proportion, variation. The SI System of units is used throughout the course.

Winter semester - 3 lecs per week

Text: Notes prepared by the Mathematics and Physics  
Department

### **MP 11b: Agricultural Mathematics II**

Instructor: **Prof. Buckler**

Part II of the mathematics program for Technicians is a continuation of the application of mathematical concepts to problems in agriculture. The following topics are covered: **arithmetic and geometric progressions, trigonometry,**

## MATHEMATICS AND PHYSICS

lengths, areas, volume, graphs, empirical curve fitting , and special applications of practical measurements. The SI System of units is used.

Winter semester - 3 lecs per week

Text: Notes prepared by the Mathematics and Physics  
Department

### MP 12a: **Statics**

Instructor: **Prof. Buckler**

An introduction to statics. It involves forces, graphical and mathematical addition of vectors, free body and force diagrams, the conditions for equilibrium for concurrent coplanar forces, parallel forces, and noncurrent non-parallel forces, centre of gravity of regular areas, friction, its coefficient, and the inclined plane.

Laboratory instruction is a part of the course, permitting the student to perform elementary experiments which demonstrate the principles he is studying, and to develop techniques of solving physical problems.

Fall semester - 1 lec and 4 labs per week.

Text: To be announced.

### MP 40a: **Electricity and Electrical Measurements**

Instructor: **Prof. Buckler**

Part I is a basic course in electricity and electrical measurements. 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.



## **MATHEMATICS AND PHYSICS**

Fall semester - 2 lecs and 2 labs per week

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

### **MP 41b: 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 70a: 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 71b: Computer Programming**

Instructor: **Prof. Fraser**

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

Winter semester - equivalent of one lecture per week

## MATHEMATICS AND PHYSICS

### **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 100a: Calculus and Analytic Geometry I**

Instructor: **Prof. Fraser**

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 - 3 lecs per week

Text: Goodman, ANALYTIC GEOMETRY AND THE CALCULUS

### **MP 105b: Calculus and Analytic Geometry II**

Instructor: **Prof. Fraser**

A continuation of MP 100 dealing mainly with the integral calculus. Both definite and indefinite integrals will be studied with applications 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 - 3 lecs per week

Text: Goodman, ANALYTIC GEOMETRY AND THE CALCULUS

## **MATHEMATICS AND PHYSICS**

### **MP 106b: 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 included: Analytic geometry; series; sequences; exponential function; logarithmic function; numerical integration.

Spring semester - 3 lecs and 1 lab per week

Text: To be announced

### **MP 110b: 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

### **MP 120b: 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 200a,b: **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 210a: **Electrical Phenomena**

Instructor: **Prof. Smith**

This course deals with electrical and magnetic effects starting with electric fields, capacitance and motion of charges in electric fields. Electric circuits and currents are taken up, along with magnetic fields, and production of magnetic fields, and induced emf.

Electrical measurements and measuring devices are investigated, along with alternating currents and circuits.

Fall semester - 3 lecs and 4 labs per week.

### MP 220a: **Computer Programming**

Instructor: **To be announced**

Programming techniques for high speed digital computers. Instruction in FORTRAN AND BASIC. Instruction in the CDC6400 computer operating system.

Fall semester - 2 lecs and 2 labs per week

### MP 230a: **Multivariable Calculus**

Instructor: **Prof. Fraser**

Prerequisites: **MP 100, MP 106**

Covers vectors, differential calculus of several variables, multiple integration.

Fall semester - 3 lecs and 2 labs per week

# MATHEMATICS AND PHYSICS

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

Instructor: **Prof. Fraser**

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 - 3 lecs and 2 labs per week

## **MP 240a: Electric Circuits**

Instructor: **Prof. Smith**

DC resistive circuits, and analysis using Kirchoff's laws, superposition, Thevenin's theorem, Norton's theorem, Delta-Wye transformations, transients and R-C, R-L, RLC circuits.

Sinusoidal currents and voltages, AC circuits, transformers, semi-conductor devices.

Fall semester - 3 lecs and 2 labs per week.



# PLANT SCIENCE



**PS 10a: Plant Science Skills I**  
**Instructor: Prof. Badcock**

The techniques and skills used in plot seeding, forage harvesting, corn harvesting, yield and dry matter determinations are demonstrated and studied in detail. Seed testing, seed stratification, bulb forcing, as well as propagation of hardwood and softwood cuttings are undertaken.

Fall semester - 2 labs per week

Text: Hartmann & Kester, PLANT PROPAGATION

## **PLANT SCIENCE**

### **PS 11b: Plant Science Skills II**

Instructor: **Prof. Badcock**

A continuation of PS10. 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 material are also studied.

Winter semester - 4 labs per week

Text: Same as PS 10

### **PS 12a: Soils and Crops I**

Instructor: **Prof. Lynch**

The basic properties of soils are studied and discussed in relation to their agronomic management. Particular attention is devoted to the engineering aspects of soil management. Fertilizer placement, tillage, irrigation and drainage are discussed in detail.

Fall semester - 2 lecs and 2 labs per week.

### **PS 13b: Soils and Crops II**

Instructor: **Prof. Lynch**

Edaphic and climatic factors influencing crop production together with the major food and forage crops produced in the Atlantic Region are discussed. Particular attention is devoted to types and agronomic requirements of planting, spray, tillage and harvesting machinery used in the production cycle.

Winter semester - 2 lecs and 2 labs per week

### **PS 40a: Field Crops Production I**

Instructors: **Profs. Bubar and Lynch**

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 - 2 lecs and 2 labs per week

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

**PS 41b: Field Crops Production II**  
Instructors: **Profs. Bubar and Lynch**

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

Winter semester - 2 lecs and 2 labs per week

Text: Same as for PS 40

**PS 42b: Cash Crops and Seed Production**  
Instructor: **Prof. Bubar**  
Prerequisite: **PS 40**

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

Winter semester - 2 lecs and 1 lab per week

Text: Same as PS 40

**PS 43a: Berry Crops**  
Instructor: **Prof. Badcock**

Berry crops studied include strawberries, raspberries, cranberries, blueberries, currants and gooseberries. In addition to study of all aspects of berry production, from planting to market, those aspects of tree fruits production involving harvesting and visits to orchards and processing plants are taken up during this course.

Fall semester - 1 lec and 2 labs per week

**PS 44b: Tree Fruit Production**  
Instructor: **Prof. Badcock**  
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.



## **PLANT SCIENCE**

Winter semester - 1 lec and 2 labs per week

Text: Teskey & Shoemaker, TREE FRUIT PRODUCTION

### **PS 45a: Turf Management I**

Instructor: **Prof. Daniels**

A study of turf grasses adapted to the Atlantic Region. Suitability for various sites, management conditions and uses are considered. General management procedures are considered.

Fall semester: 2 lecs and 2 labs per week

### **PS 46b: Turf Management II**

Instructor: **Prof. Daniels**

A continuation of PS 45 that deals with establishment and site improvement, drainage, watering, fertilizer programs and pest control.

Winter semester - 1 lec and 2 labs per week

### **PS 47a: Greenhouses**

Instructor: **Prof. Badcock**

The various types of houses in which crops are presently grown and the associated heating systems are considered in detail. A study is made of the kinds of materials available and costs. Ventilation, relative humidity and automatic controls are discussed. Start greenhouse crops production study.

Fall semester - 1 lec and 2 labs per week

### **PS 48b: Greenhouse Crops**

Instructor: **Prof. Badcock**

Prerequisite: **PS 47**

A sequel to PS47 that deals with the culture of individual vegetable crops and the important floral crops. Tomatoes, cucumbers, carnations, chrysanthemums, roses, bulb stock, and a variety of potted plants are covered both in the classroom and the associated greenhouses. Bedding plants

are also considered. Tours of the large commercial operations are also arranged.

Winter semester - 1 lec and 2 labs per week  
plus 1 week of training in a commercial  
greenhouse

**PS 49b: Potato Production**

Instructor: **Prof. Lynch**

The botanical characteristics of the potato plant, including the physiological changes involved during tuber initiation, formation and storage are considered in detail. These are related to the growing of potatoes in the field, and discussed in relation to the cultural practices involved. Seed potato production is also studied in detail.

Winter semester - 2 lecs and 2 labs per week

**PS 50a: Ornamental Horticulture I**

Instructor: **Prof. Morley**

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

Fall semester - 2 lecs and 4 labs per week.

**PS 51b: Ornamental Horticulture II**

Instructor: **Prof. Morley**

A continuation of PS 50. Landscape design is introduced and drafting fundamentals are presented with special emphasis on the systematic approach to landscaping of residential sites.

Winter semester - 2 lecs and 4 labs per week

## **PLANT SCIENCE**

### **PS 52a,b: Plant Science Project**

**Instructors: Profs. Lynch and Daniels**

A study of an agronomic or horticultural topic, which usually includes plant growing experimentation that a student will pursue in much more detail than is possible in lecture and 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 53a: Vegetable Production**

**Instructor: Prof. Lynch**

Botanical and horticultural characteristics of garden and commercial vegetable crops are studied, and related to the changing pattern of production technology, harvesting, storage and consumer requirements. Crops studied in detail include root vegetables, cole crops, peas, beans, salad and green crops.

Fall semester - 3 lecs and 4 labs per week

Text: Ware and McCollum, PRODUCING VEGETABLE CROPS

### **PS 54a: Plant Propagation**

**Instructor: Prof. Badcock**

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 70c: Landscape Techniques**

Instructor: **Prof. Morley**

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

**PS 71a: Ornamental Horticulture III**

Instructor: **Prof. Morley**

Prerequisites: **Ornamental Horticulture I and II**

A course with special emphasis on advanced arboricultural considerations including environmental and non-infectious diseases of trees, bracing and cabling, street trees, machinery, and diagnosis and evaluation of shade trees.

Fall semester - 3 lecs and 6 labs per week

**PS 72b: Ornamental Horticulture IV**

Instructor: **Prof. Morley**

A continuation of PS 71 with intermediate landscape architectural problems of greater complexity with continued emphasis on the systematic approach to site planning and design. Landscape illumination, estimating, and landscape documents are discussed.

Winter semester - 3 lecs and 6 labs per week.

**PS 73a: Art and Design I**

Instructor: **Prof. Morley**

Prerequisite: **PS 51**

Art and Design principles are examined through a study of plant and man-made materials with reference to its indoor-outdoor use. Landscape design and presentation techniques, the art of training and growing plants, as well as the art of pruning specialized plants are covered.

Fall semester - 3 lecs per week.

## **PLANT SCIENCE**

### **PS 74b: Art and Design II**

**Instructor: Prof. Morley**

A continuation of Art and Design I in which the art of gardening in containers, landscape construction, paving materials, and use of mulches in the landscape are discussed.

Winter semester - 3 lecs per week

### **PS 75b: Ornamental Horticulture Project**

**Supervisors: Profs. Morley and Daniels**

A study of a horticultural topic that a student will pursue in much greater detail than is possible in lecture and laboratory course presentations. The student is evaluated on initiative, presentation technique, and competence in carrying out the objectives of the project from the time the study is initiated until the completion of the project.

Winter semester-Time to be arranged

### **PS 76b: Crop Physiology**

**Instructor: Prof. Lynch**

A course dealing with plant responses to environment. Competition in crop canopies for light, temperature, water, mineral elements and carbon dioxide is discussed. Particular attention is devoted to relating management practices in crop production to the principles of plant physiology.

Spring semester - 3 lecs and 2 labs per week

### **PS 77b: Nursery and Landscape Crops**

**Instructors: Profs. Daniels and Badcock**

Location, operation and management of the various structures used in the production of landscape 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 - 2 lecs and 2 labs per week

**PS 100a: 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)

**PS 110a: General Plant Science**  
**Instructor: Prof. Lynch**

An introductory course in plant science for engineering students. The course will deal with the identification and production of some of the more common crop plants. Special attention will be given to the problems related to seedlings, cultivation, and harvesting of these crops.

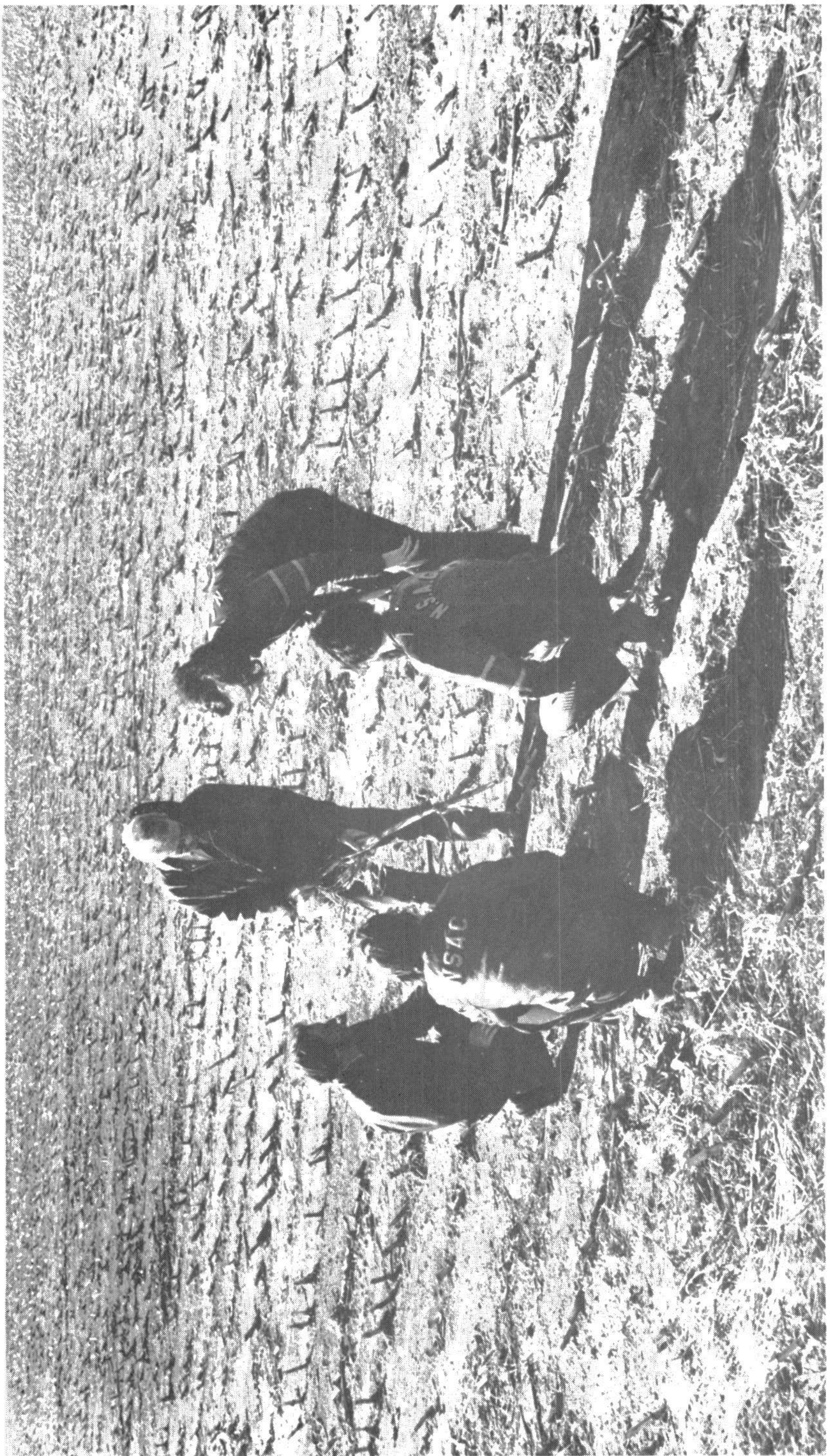
Fall semester - 2 lecs and 2 labs per week

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

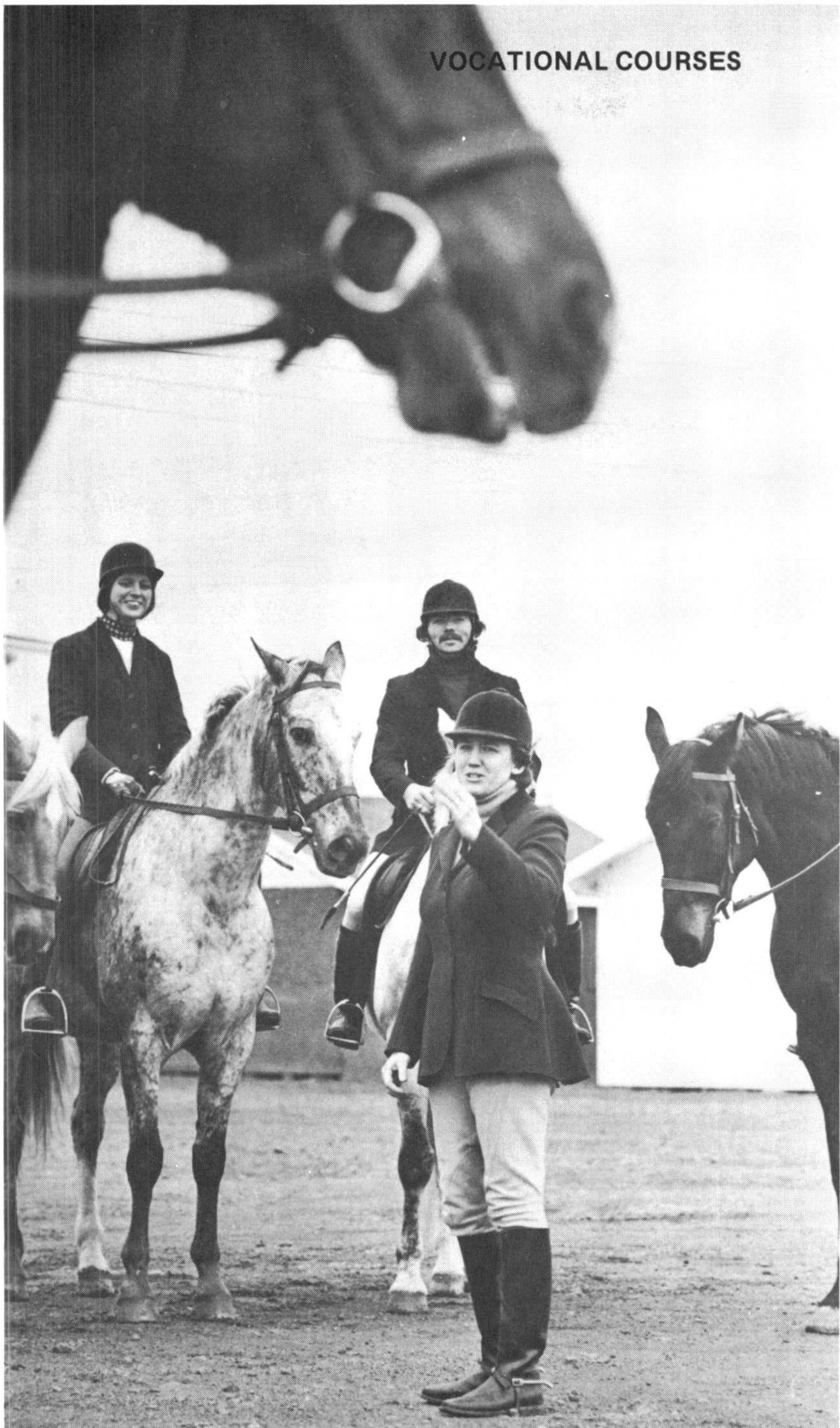
**PS 200b: Greenhouse Crop Production and Floriculture**  
**Instructor: Prof. Daniels**

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





## 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 1976-77 year. Similar, but not necessarily the same, courses will be planned for the 1977-78 year.

Basic Farrier Training  
Meat Cutting  
Artificial Insemination  
Basic Farrier Training  
Meat Cutting  
Horsemastership  
Modern Farm Practices (Units 1, 2, or 3)  
Dairy Farm Worker  
Maple Syrup Production  
CanFarm Record System  
Turf Production  
Meat Cutting  
Operation & Repair of Farm Tractors  
Advanced Farrier Training  
Horsemastership  
Farm Accounting  
Tree Fruit Production  
Operation & Repair of Farm Machinery  
Swine Herd Operation  
Blueberry Production  
Meat Cutting  
Commercial Strawberry Production  
Ornamental Horticulture  
Floral Design  
Power Saw Operation & Safety  
Roadside Marketing  
Basic Sheep Production  
Basic Farm Welding  
Supervising Harvest Workers (N.S.A.C. Mobile)  
Basic Christmas Tree Production (N.S.A.C. Mobile)  
Mink Production (N.S.A.C. Mobile)  
Basic Iron Work  
Goat Husbandry  
Introductory Floral Design  
Power Saw Operation & Safety (N.S.A.C. Mobile)  
Arboriculture I  
Basic Christmas Tree Production  
Christmas Tree Grading

## **ENTRANCE REQUIREMENTS**

These are specific for each course. In most cases, a candidate for admission must (a) be at least eighteen years of age, (b) present a satisfactory medical report, (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**

Board at the Nova Scotia Agricultural College is \$38.00 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 ten dollars.

## **LIVING ALLOWANCES**

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

Young people who have been out of school for less than three years, who are not receiving unemployment insurance or assistance from other agencies, who are in a course of two weeks or longer duration, and who must live away from home during the course may qualify for a living allowance of \$15.00 per week from the N.S.A.C. (Provincial Funds.)

## **APPLICATIONS**

Adults should visit their nearest Canada Manpower Office and ask if they may be selected for training on the course or courses which meet their particular needs.

Young people who have just left school and who are interested in any of the vocational courses should write a letter of application to the Co-ordinator of Vocational Courses, Agricultural College, Truro, N.S.

Location of Canada Manpower Centres in the Atlantic Region: .

### **Prince Edward Island**

1. Dominion Building, Richmond Street, Charlottetown, P.E.I.
2. Federal Building, Central Street, Summerside, P.E.I.
3. University of P.E.I. Branch, Charlottetown, P.E.I.

### **New Brunswick**

1. P.O. Box 1069, Moncton, N.B.
2. N.B. Institute of Technology, Mountain Road, Moncton, N.B.
3. Allaires Building, P.O. Box 518, Richibucto, N.B.
4. P.O. Box 568, Sackville, N.B.
5. P.O. Box 578, Shediac, N.B.
6. Moncton University Branch, Moncton, N.B.
7. Mount Allison University Branch, Sackville, N.B.
8. Customs Building, 189 Prince William Street, Saint John, N.B.
9. 48 Maple Avenue, Sussex, N.B.
10. Saint John Institute of Technology, Saint John, N.B.
11. 93 Water Street, St. Stephen, N.B.
12. 205 St. Patrick Street, Bathurst, N.B.
13. 5B Adam Street, P.O. Box 610, Campbellton, N.B.
14. Federal Building, 22 Emerson Street, Edmundston, N.B.
15. Federal Building, Broadway, Grand Falls, N.B.
16. 626 Campbell Street, Fredericton, N.B.
17. Main Street, P.O. Box 370, Minto, N.B.
18. Federal Building, Pleasant Street, Newcastle, N.B.
19. Federal Building, Duke Street, Chatham, N.B.
20. Federal Building, Regent Street, Woodstock, N.B.

### **Newfoundland**

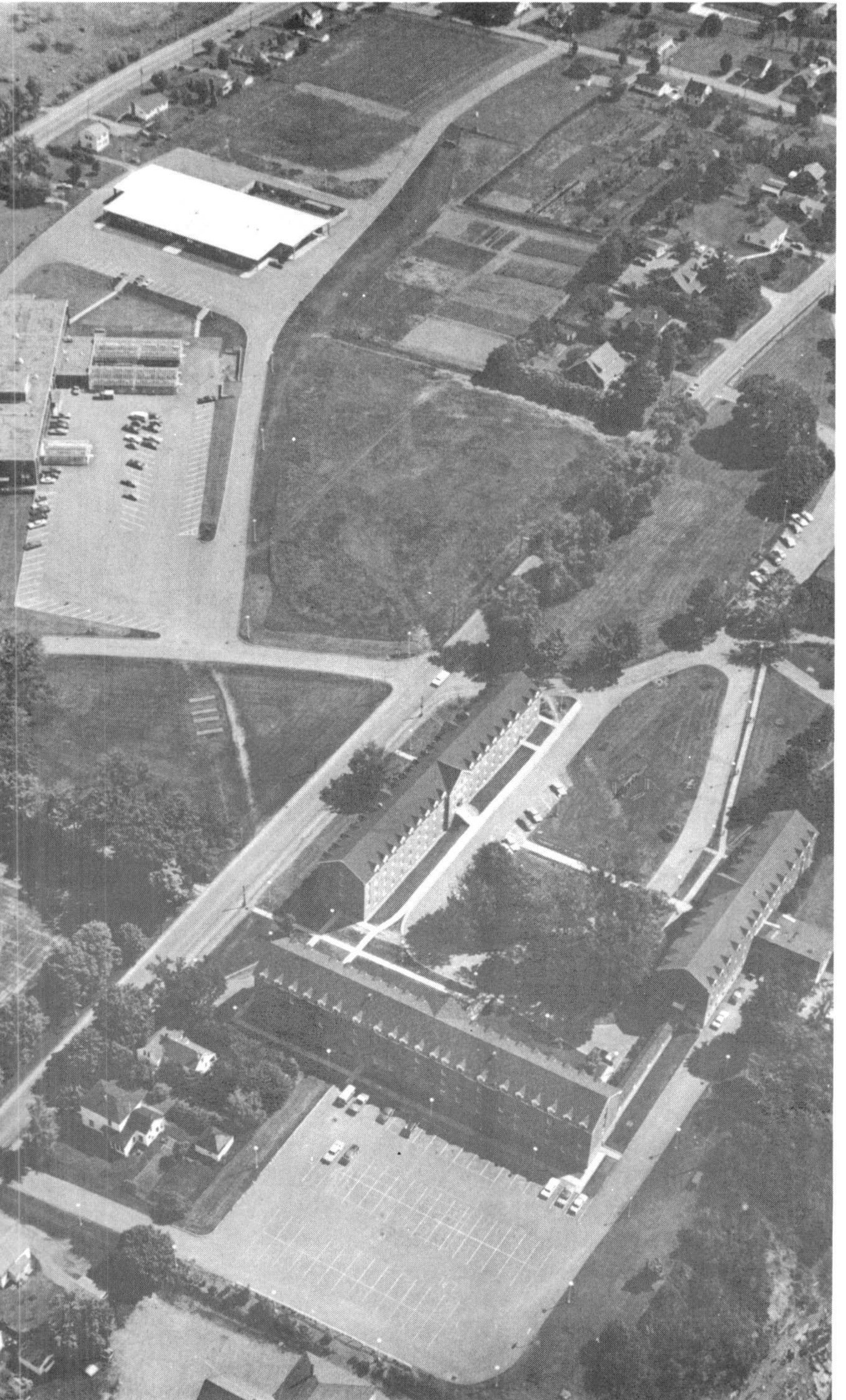
1. 4 Herald Avenue, Cornerbrook, Nfld.
2. New Mexico Drive, Harmon Drive, Stephenville, Nfld.
3. High Street, P.O. Box 480, Grand Falls, Nfld.
4. Gander, Nfld.
5. (Happy Valley), 108 Park Drive, Spruce Park, Goose Bay, Labrador, Nfld.
6. Shopping Plaza, Wabush Lake, Labrador, Nfld.
7. 391 Water Street West, P.O. Box 1900, St. John's, Nfld.
8. Newfoundland College of Fisheries, St. John's, Nfld.
9. Newfoundland College of Trades & Technical Branch, St. John's, Nfld.
10. Federal Building, Harbour Grace, Nfld.

11. St. Gabriel's Hall, Marystown, Nfld.
12. Memorial University Branch, St. John's, Nfld.

### **Nova Scotia**

1. 50 Victoria Street, Box 248, Amherst, N.S.
2. 59 Main Street, Glace Bay, N.S.
3. 35 Donald Street, New Glasgow, N.S.
4. 31 Front Street, Pictou, N.S.
5. St. Francis Xavier University, Antigonish, N.S.
6. 211 Prince Street, North Sydney, N.S.
7. Sydney Mines, N.S.
8. P.O. Box 669, Port Hawkesbury, N.S.
9. Federal Building, Railway Street, Inverness, N.S.
10. P.O. Box 220, Mulgrave, N.S.
11. P.O. Box 1120, Sydney, N.S.
12. P.O. Building, Plummer Avenue, New Waterford, N.S.
13. 15 Arlington Place, Truro, N.S.
14. Bridgewater Shopping Plaza, P.O. Box 680, Bridgewater, N.S.
15. Lunenburg, N.S.
16. 2nd Floor, Twin Tower, Royal Bank Building, 46 Portland Street, Dartmouth, N.S.
17. P.O. Box 3250, Halifax South Postal Station, Halifax, N.S.
18. Halifax North Branch, 5450 Cornwallis Street, Halifax, N.S.
19. Sunny Side Shopping Mall, P.O. Box 702, Bedford, N.S.
20. Spryfield, N.S.
21. Dalhousie University Branch, Halifax, N.S.
22. St. Mary's University Branch, Halifax, N.S.
23. Mount St. Vincent's University Branch, Halifax, N.S.
24. Federal Building, 495 Main Street, Kentville, N.S.
25. 87 Gerrish Street, Windsor, N.S.
26. Acadia University Branch, Wolfville, N.S.
27. 164 Main Street, Liverpool, N.S.
28. 13 Willow Street, Yarmouth, N.S.
29. P.O. Box 879, Digby, N.S.
30. P.O. Box 819, Shelburne, N.S.







# **SCHOLARSHIPS**

## **ENTRANCE SCHOLARSHIPS**

### **[DEGREE COURSES]**

#### **NOVA SCOTIA INSTITUTE OF AGROLOGISTS SCHOLARSHIP**

The Nova Scotia Institute of Agrologists has provided a scholarship of \$250. 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 to the Registrar, Nova Scotia Institute of Agrologists, N.S.A.C., Truro, N.S., for an application form, which will be available by July 1. The application and the applicant's Grade XI and Grade XII (if the applicant has one) certificate should be in the Registrar's office not later than August 15.

#### **CANADA PACKERS LIMITED SCHOLARSHIP**

Canada Packers Limited 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.

#### **NOVA SCOTIA SAVINGS AND LOAN COMPANY SCHOLARSHIP**

In order to encourage excellence in studies and outstanding achievement in the 4-H movement, Nova Scotia Savings and Loan Company offers a scholarship of \$250. to a member of that movement who is a resident of Nova Scotia and is entering the Nova Scotia Agricultural College for the first time. In making the award, consideration will be given to academic standing, record in 4-H work, and financial need. Applications should be sent to the Registrar's office before August 1.



## **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 Christmas and Easter school marks of the matriculation year and a recommendation from the Principal or of final school marks of the matriculation year. Application on the basis of Christmas and Easter marks must be made before May 15; candidates with high final school marks will be considered without an application. Candidates are urged to apply for consideration on the basis of school marks and a recommendation.

## **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 and  
Forestry..... P. O. Box 2000 Charlottetown, P. E. I.

## **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 1st and close May 1st.

## **ENTRANCE SCHOLARSHIPS [DEGREE OR TECHNICIAN COURSE]**

### **NOVA SCOTIA AGRICULTURAL COLLEGE ALUMNI SCHOLARSHIP**

The Nova Scotia Agricultural College Alumni Association offers two scholarships of \$300. 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 a District Federation of Agriculture.

Selection will be made on the following basis:

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 fifty dollars, 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 \$600. and an all expense paid trip to the Canadian National Exhibition to a candidate wishing to enter a degree course in Home Economics, a degree course in Agriculture, a degree course in Veterinary Medicine, or a technician course in Agriculture.

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.

## **ENTRANCE SCHOLARSHIPS [TECHNICIAN COURSE]**

### **MARITIME CO-OPERATIVE SERVICES LTD. BURSARIES**

Maritime Co-operative Services Ltd. 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 Maritime Co-operative Services Limited, 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 1977-78 in the 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.

### **PROVINCIAL SCHOLARSHIPS: NOVA SCOTIA AND NEW BRUNSWICK**

The provinces of Nova Scotia and New Brunswick offer scholarships of \$200 to their residents entering one of the Technician Courses at the Nova Scotia Agricultural College with an average of 80% or better.

### **CONTINUATION SCHOLARSHIPS [DEGREE COURSE]**

(For students at the Nova Scotia Agricultural College)

### **THE NOVA SCOTIA FEDERATION OF AGRICULTURE SCHOLARSHIP**

The Nova Scotia Federation of Agriculture offers a scholarship of \$150. to a resident of Nova Scotia who has completed the work of the first year of the Degree Course and is entering the second year. Financial need and academic standing will be considered in making the award. No application is necessary.

### **GULF OIL CANADA LIMITED**

Gulf Oil 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 \$150. 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 Agricultural and Forestry  
P. O. Box 2000  
Charlottetown, P. E. I.

### **HON. A. W. MacKENZIE SCHOLARSHIP**

A scholarship of \$150. is offered by the Hon. 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.

## **CONTINUATION SCHOLARSHIPS**

(DEGREE, TECHNICIAN AND TECHNOLOGIST)  
(For students at the Nova Scotia Agricultural College)

### **ATLANTIC PROVINCES HATCHERY FEDERATION SCHOLARSHIP**

The Atlantic Provinces Hatchery Federation offers a scholarship of \$200. 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.

## **CONTINUATION SCHOLARSHIPS**

**[TECHNICIAN AND TECHNOLOGIST]**

(For students at the Nova Scotia Agricultural College)

### **THE NOVA SCOTIA FEDERATION OF AGRICULTURE SCHOLARSHIP**

The Nova Scotia Federation of Agriculture offers a scholarship of \$150 to a resident of Nova Scotia who has completed the work of the first year of the Technician Course and is entering the second year. Financial need and academic standing will be considered in making the award. No application is necessary.

## **PROVINCIAL SCHOLARSHIPS: NOVA SCOTIA AND NEW BRUNSWICK**

The Provinces of Nova Scotia and New Brunswick offer to

their residents enrolled in one of the Second Year Technician Courses or in the Technologist Course a scholarship of \$200., provided that an average of at least 80% has been attained on the work of the previous year.

### **CANADIAN FEED MANUFACTURERS ASSOCIATION [ATLANTIC DIVISION] SCHOLARSHIP**

The Atlantic Division of the Canadian Feed Manufacturers 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.

### **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 \$500. 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 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.

### **NEW BRUNSWICK POULTRY COUNCIL SCHOLARSHIP**

The New Brunswick Poultry Council offers an annual

scholarship of \$400 to a graduate of the pre-veterinary course at N. S. A. C. 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.

### **CANADA PACKERS LIMITED SCHOLARSHIP**

Canada Packers Limited 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.

### **MARITIME CO-OPERATIVE SERVICES LIMITED SCHOLARSHIP**

Maritime Co-operative Services Limited offers a scholarship of \$200. 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 Second Year Technician Animal Nutrition and one for Technologist Advanced Animal Nutrition.

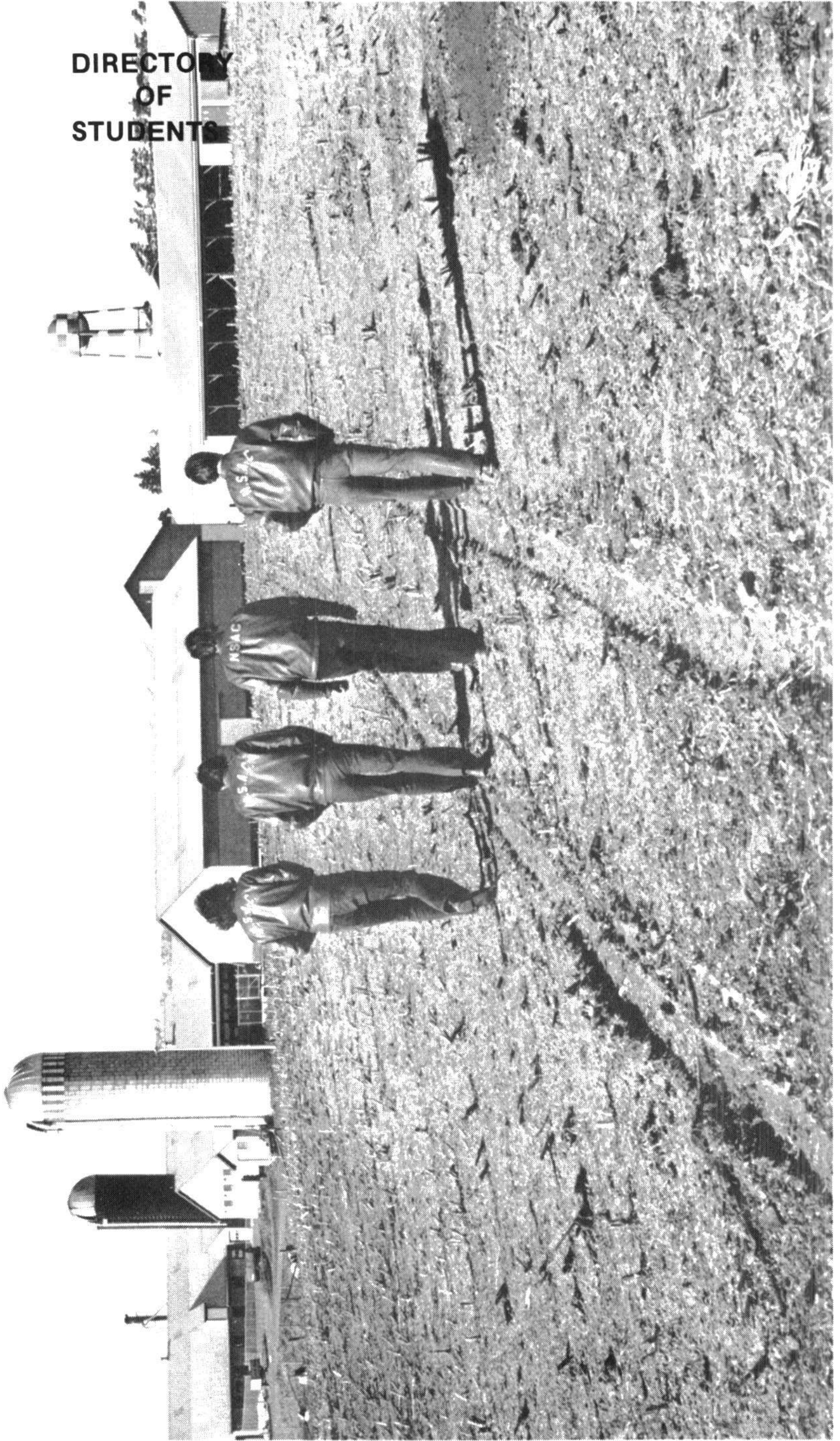
**NOVA SCOTIA VETERINARY MEDICAL  
ASSOCIATION PRIZE**

The Nova Scotia Veterinary Medical Association provides a prize of \$50. to a deserving student who excels in the Animal Physiology and Pathology 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 a \$1000. Dominion of Canada Bond, the interest on which is to be used for an annual prize available to a Nova Scotia Agricultural College graduate registered in an 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.

**DIRECTORY  
OF  
STUDENTS**





**NOVA SCOTIA AGRICULTURAL COLLEGE  
ENROLLMENT 1976-77**

**COURSES LEADING TO B.Sc. [AGR.] OR PRE-VET**

**First Year—Class of '78**

Scott Acker, R. R. #1, Wilmot Station, N. S.  
Joan Allwood, 1469 Carleton Street, Halifax, N. S.  
Johanne Anthony, 3A Rueben Court, Dartmouth, N. S.  
Bonita Beaton, West Bay Road, Inverness Co., N. S.  
M. Bonnie Belliveau, 53 Vanier St., Campbellton, N. B.  
David Bent, R. R. #3, Lawrencetown, N. S.  
Ivan Benwell, 22 Union St., Campbellton, N. B.  
Patricia Boomhower, 12 McGill Terrace, Charlottetown,  
P.E.I.  
A. Lyle Boswall, 199 Belvedere Ave., Charlottetown, P.E.I.  
R. Grant Bradbury, 487 Townsend St., Sydney, N. S.  
Kevin Budd, 2156 Mountain Rd., Moncton, N. B.  
Joan Bursey, Quispamsis Rd., R. R. #3, Rothesay, N.B.  
Robert Chipman, 6 Spring Garden Rd., Kentville, N. S.  
Lana Crewe, 22 Richardson Dr., R. R. #1, Dartmouth, N.S.  
John Cruickshank, 91 Smith Ave., Truro, N.S.  
Phyllis Cummings, 3166 Albert St., Halifax, N. S.  
Ann Curwin, 8 Elizabeth Court, Saint John, N. B.  
Kathleen Dalton, 221 Hanover St., Newcastle, N. B.  
Joanna DeLong, R. R. #1, Shubenacadie, N. S.  
Basil Dickson, 7 Church St., Springhill, N. S.  
Janice Dimock, 107 Grover St., Woodstock, N. B.  
Peggy Dixon, Box 279, Baie Verte, Newfoundland  
E. Jane Donkin, R. R. #3, Truro, N.S.  
Judith Durette, 48 Matheson St., Campbellton, N. B.  
Colleen Dwyer, R. R. #1, Christmas Island, N. S.  
Jane Eye, 5397 Glebe St., Halifax, N. S.  
Christine Fawcett, R. R. #5, Woodstock, N. B.  
Sally Fillmore, P. O. Box 11, Smith St., Oxford, N. S.  
Bertha Gallant, 380 Sweeney Lane, Newcastle, N. B.  
Nicole Gallant, 271 Centennial Dr., Summerside, P.E.I.  
Kathleen Glover, Box 945, R. R. #5, Yarmouth, N. S.  
Gerald Goodine, Box 164, Perth, N. B.  
Gregory Gormley, 16 Cliff St., Saint John, N. B.  
Sharon Graves, R. R. #1, Port Mouton, N. S.  
Carol Guidry, Red Head, R. R. #2, Saint John, N. B.  
Claire Guyette, Box 53, Elmsdale, N. S.

Ernest Hudson, O'Leary, R. R. #3, P. E. I.  
 Thelma Johnston, 11 Pine Hill Rd., Dartmouth, N. S.  
 Lowell Johnstone, 151 Ashby Rd., Sydney, N. S.  
 Gregory Kennah, 267 St. George St., Bathurst, N.B.  
 Catharina Lake, 105 Stannus St., Windsor, N. S.  
 Marjorie Langille, 426 Pleasant St., New Glasgow, N. S.  
 Anne Lasovski, 3362 Landry Ave., New Waterford, N. S.  
 Michael Lavigueur, 65 Edinburgh Ave., Gander, Newfoundland  
 Nancy Lewis, 3452 Baker St., New Waterford, N. S.  
 Helen Lowther, R. R. #3, Amherst, N. S.  
 Elizabeth Lythgoe, 252 Glengarry Place, Fredericton, N. B.  
 Judith Manuel, 32 Dustan St., Dartmouth, N. S.  
 Mary-Lou Martin, 169 Queen St., Saint John, N. B.  
 Valerie Millen, 386 Willow Ave., New Glasgow, N. S.  
 Sandra Moores, 1361 Edward St., Halifax, N. S.  
 Mark Murchison, 58 Mount Pleasant Ave., Saint John, N. B.  
 Randolph Murdoch, R. R. #3, Chatham, N. B.  
 Terri Murray, 12 Hillside Dr., Antigonish, N. S.  
 Catherine MacAulay, 18 Bluewaters Dr., Glace Bay, N. S.  
 Andrew McCain, Riverview Dr., Florenceville, N. B.  
 Peter McCarthy, 139 Johnston Rd., Saint John, N. B.  
 Meta McCleave, R. R. #1, Hampton, N. B.  
 Margaret MacDonald, 495 Atlantic St., Sydney, N. S.  
 G. Bernard MacDougall, 48 Greenwold, Antigonish, N. S.  
 Helen MacGregor, 6079 Oakland Rd., Halifax, N. S.  
 John MacInnis, R. R. #5, Purl Brook, Antigonish, N. S.  
 Kevin MacIssac, Souris, R. R. #1, P. E. I.  
 Mary McKenna, 42 Sunnyside Dr., Sussex, N. B.  
 Paul McKinney, Hampstead, R. R. #1, N. B.  
 Ellen MacKinnon, 54 Victoria St., Glace Bay, N. S.  
 Florence MacLachlan, West Bay Road, Inverness Co., N.S.  
 Heather McNeil, 108 Forestview Court, Fredericton, N. B.  
 Robert MacTavish, 1180 Monarch St., Bathurst, N. B.  
 Lorne McVicar, 33 Hawthorne St., Antigonish, N. S.  
 Thomas Neily, R. R. #2, Middleton, N. S.  
 Donald Northcott, Bldg. 401A, George Loup, Pleasantville, St. John's, Nfld.  
 Patrick O'Brien, 40 Summerhill Ave., Pointe Claire, Quebec  
 Lucinda Parkin, 59 Club Road, Upper Montclair, N. J. 07043  
 Joan Paruch, 424 Birch Hill Drive, Sydney, N. S.  
 Jane Pearton, 22A First St., Dartmouth, N. S.  
 Calvin Piggott, 6675 Edward Arab Ave., Halifax, N. S.  
 Edmund Purcell, 101 Dorothea Drive, Dartmouth, N.S.  
 Dorothy Pursey, 104 Gerald St., Charlottetown, P.E.I.

Kevin Pyke, 533 Pictou Road, Truro, N. S.  
 Patricia Quinn, 36 Union St., Bedford, N. S.  
 Donna Rainforth, Berwick, R. R. #1, N. S.  
 A. Paul Read, 627 Water Street, Summerside, P. E. I.  
 Pauline Remme, 15 Oceanview Dr., Purcell's Cove, N. S.  
 Julie Robinson, 355 Manchester Ave., Saint John, N. B.  
 Michael Sampson, 67 Willow St., Sydney, N. S.  
 Lorna Sanford, Summerville, Hants Co., N. S.  
 Terry Silver, Barton, R. R. #1, Digby Co., N. S.  
 Carl Slipp, R. R. #1, Hampstead, N. B.  
 Raymond Slivocka, 460 Victoria Ave. Ext., New Glasgow,  
 N.S.  
 Kathryn Smith, 40 Greenwold, Antigonish, N. S.  
 Paula Steer, Model Farm Road, R. R. #4, Rothesay, N. B.  
 Bruce Thompson, R. R. #1, Moncton, N.B.  
 Catherine Thompson, Box 157, Elmsdale, N. S.  
 Judith Thompson, 15 Frederick Ave., Halifax, N. S.  
 William Thompson, 309 Ridgeway Dr., Riverview, N. B.  
 Cynthia Trann, 326 Inglewood Dr., Fredericton, N. B.  
 Jeannie Van Dyk, R. R. #1, Caledonia, N. S.  
 Charles Van Kampen, Box 652, Charlottetown, P. E. I.  
 John Van Roestel, R. R. #3, Lawrencetown, N.S.  
 Anne Wilson, 258 Sanborne St., New Glasgow, N. S.

### **Second Year—Class of '77**

William Akey, R. R. #1, Sackville, N. B.  
 Wanda Alexander, Box 1312, St. Stephen, N. B.  
 David Allen, Wellington, R. R. #2, P. E. I.  
 Rollin Andrews, Milton, R. R. #2, P. E. I.  
 Karen Balloch, 68 Portledge Ave., Moncton, N. B.  
 Yves Berube, 493 Victoria St., Dalhousie, N. B.  
 Carol Bubar, 19 North St., Truro, N. S.  
 P. Archie Bubar, Hartland, R. R. #5, N. B.  
 Susan Burbridge, 17 Winchester Ave., Halifax, N. S.  
 Vernon Campbell, R. R. #6, Kensington, P. E. I.  
 K. Thane Clark, Kensington, R. R. #4, P. E. I.  
 Willaim Cole, R. R. #4, Middleton, N. S.  
 Kevin Crosby, 5870 Inglewood Drive, Halifax, N. S.  
 Ralph DeLong, R. R. #1, New Germany, N. S.  
 John Elliott, Anagance, R. R. #2, N. B.  
 Jo-Anne Featherstone, 8 Ivy St., Box 746, Greenwood, N. S.  
 David Feindel, Aylesford, N. S.  
 Stephen Ferguson, 45 Hastings Dr., Dartmouth, N. S.  
 Michele Fillmore, 44 Centennial Dr., Apt. 10, St. John, N.B. B.

David Francis, Crapaud, P. E. I.  
 Karen Gallant, 135 Milford Rd., Saint John, N. B.  
 Cheryl Gilmore, Lake Pond, R. R. #1, Rothesay, N. B.  
 Kirsten Goodman, 95 Temperance St., New Glasgow, N.S.  
 Nancy Graham, 6 Concord St., Glace Bay, N. S.  
 John Greenough, Newport, R. R. #3, N. S.  
 O. Eugene Hachey, 888 Chaplin Is. Rd. Newcastle, N.B.  
 Derek Hanscome, Aroostook Jct., N. B.  
 Peter Harrison, 14 Grand St., Yarmouth, N. S.  
 Roger Henry, 158 Nassau St., Charlottetown, P.E.I.  
 Jennifer Holt, Box 136, Petitcodiac, N. B.  
 Wanda Horwath, 3731 Emerald St., New Waterford, N.S.  
 Robert Howard, Bradalbane, R. R. #1, P.E.I.  
 Kimberlee Hughes, R. R. #1, Wolfville, N.S.  
 Donna Johnston, 339 Beaver St., Summerside, P. E. I.  
 Susan Johnston, Golden Grove Rd., R. R. #4, Saint John,  
 N.B.  
 Stephen Justason, Pennfield, N.B.  
 Maureen Kennah, 444 Rust Bank Court, Bathurst, N.B.  
 Gregory Kennedy, Box 332, Charlottetown, P. E. I.  
 Peter Kennedy, 85 Westmount Rd., Sydney, N. S.  
 Julie Kerr, 5 Cross Road, Dartmouth, N. S.  
 Carl LeBlanc, Wedgeport, N. S.  
 Alan Leck, 39 Ernest Ave., Dartmouth, N. S.  
 Margaret Leonard, R. R. #3, Truro, N. S.  
 David Lewis, East Margaretsville, N. S.  
 Elizabeth Mellish, Cardigan, R. R. #6, P. E. I.  
 R. Gary Morton, 8 Vimy Rd., Truro, N. S.  
 Shane Murphy, Montague, R. R. #4, P. E. I.  
 M. Catherine MacDougall, 27 North View Dr., Antigonish,  
 N. S.  
 Garry McGory, 33 Barnes Rd., St. John's, Nfld.  
 David Mackay, R. R. #3, Merigomish, N.S.  
 Frances McKenzie, 705 Sterling Rd., Glace Bay, N. S.  
 Brian McOnie, 19 Mount Pleasant St., Dartmouth, N. S.  
 Clive Nickerson, Keswickridge, R. R. #1, N. B.  
 Jill Nickerson, Box 5260, R. R. #3, Yarmouth, N. S.  
 Thomas O'Brien, Box 1355, R. R. #1, Yarmouth, N. S.  
 Eric Patterson, Wolfville, R. R. #1, N. S.  
 Brian Power, 1042 Highland Ave., New Minas, N. S.  
 W. Susan Pye, 18 Dahlia St., Dartmouth, N. S.  
 Wilfred Reader, 284 Pennywell Rd., St. John's, Nfld.  
 Sheila Ryan, 112 Military Rd., St. John's, Nfld.  
 Frank Slipp, R. R. #2, Woodstock, N. B.  
 David Taylor, 172 Valleyview Cres., Saint John, N. B.



E. Elizabeth Taylor, Wood Island West, P. E. I.  
David Thompson, Upper Stewiacke, N. S.  
David Vickery, R. R. #5, Antigonish, N. S.  
Dawna Vickery, R. R. #5, Antigonish, N. S.  
Michael Wolter, R. R. #1, Clarenceville, Missisquoi, P.Q.  
Kathy Woolaver, Newport, N. S.

### **Course Leading to B. E. [AGR.]**

#### **First Year—Class of '78**

Donald Anderson, Box 1372, Sussex, N. B.  
Stephen Arbing, O'Leary, R. R. #3, P. E. I.  
David Bell, 2 Ford's Rd., Corner Brook, Nfld.  
Arnold Beyer, R. R. #3, Norton, N. B.  
John Chisholm, 34 Granview Ave., Truro, N. S.  
Mark Dawson, 10 Sherwood Court, Fredericton, N. B.  
Claude Dube, R. R. #4, Grand Falls, N.B.  
William Farrell, 23 Granview Dr., Dartmouth, N. S.  
Shaun Gillis, Little Pond, Florence, N. S.  
Kenneth Lingley, 10 Plymouth Rd., Dartmouth, N. S.  
Craig Mitchell, 5 Siesta Dr., Box 142, Truro, N. S.  
Gerard MacDonell, Elmsdale, R. R. #1, N. S.  
Arthur Ormiston, 182 High St., Sydney, N. S.  
John Rudderham, R. R. #1, North Sydney, N. S.  
Peter Versloot, R. R. #3, Keswick, N. B.

#### **Second Year—Class of '77**

Colin Crabbe, Perth-Andover, N. B.  
Kenneth Jeffers, 168 Young St., Truro, N. S.  
Martin Porskamp, Canning, R. R. #5, N. S.  
Glenn Ross, 48 Salter Ave., Truro, N. S.  
Stephen Tweedie, Kouchibouguac, N.B.  
Andrew Vermeulen, Milford Station, N. S.  
Robert Wilson, R.R. #1, Stanley, N.B.

## TECHNICIAN DIPLOMA

### First Year—Class of '78

Gailen Allan, Glassville, N. B.  
Murray Amiro, Lower West Pubnico, N. S.  
Brian Bennett, 469 Main Street, Kentville, N. S.  
James Berkvens, R. R. #2, Antigonish, N. S.  
Guy Boswall, Charlottetown, R. R. #3, P.E.I.  
Donald Bowser, 229 Yale Ave., Riverview, N. B.  
Joseph Brenton, R. R. #2, Stewiacke, N. S.  
Alan Briggs, Box 158, Plaster Rock, N. B.  
Richard Briggs, R. R. #2, Plaster Rock, N. B.  
Gerald Brouwer, R. R. #2, Truro, N. S.  
Colin Campbell, 238 Hillsboro St., Charlottetown, P. E. I.  
Merrill Carew, New Wiltshire, R. R. #4, P. E. I.  
Martin Ching, Box 62, Souris, P. E. I.  
Paula Chisholm, 104 Hawthorne St., Antigonish, N. S.  
Karen Cochrane, 40 McDonald Lane, Moncton, N. B.  
Fletcher Colpitts, R. R. #1, Petitcodiac, N. B.  
Remi Comeau, Saulnierville, R. R. #1, N. S.  
Boyd Crouse, R. R. #1, Lunenburg, N. S.  
Allison Dancey, Site 76, Box 42, Marine Dr., St. John's, Nfld.  
David Doiron, Box 108, Pomquet, N.S.  
Paul Drake, Vernon Bridge, P. E. I.  
Bruce Dunham, R. R. #1, Kentville, N. S.  
Bernadette Dupuis, Box 398, Memramcook-Est, N. B..  
Lesley Eden, 2720 King St., Halifax, N. S.  
G. Nelson Edge, Englishtown, N. S.  
Carol Engram, Site 20, Box 14, R. R. #1, Enfield, N. S.  
Susan Fahey, 36 Park St., Moncton, N. B.  
Alan Franey, R. R. #3, Aylesford, N. S.  
Dawn Freeman, R. R. #3, Shelburne, N. S.  
Nell Gardner, R. R. #1, Orangedale, N. S.  
Randal Goodfellow, R. R. #4, Danville, P. Q.  
Stephen Greene, Florenceville, N. B.  
Stephen Henry, 7 Gourley Ct., Fredericton, N. B.  
Patricia Hunt, 44 Prince Charles Dr., Charlottetown, P.E.I.  
Timothy Johnson, 79 Burnyeat St., Truro, N. S.  
Vicky Jolly, 546 Main St., Kentville, N. S.  
Gerald Kilfoil, Bath, R. R. #1, N. B.  
Joey Kinney, Box 133, Andover, N. B.  
Marion Knappe, Fredericton Junction, N. B.

Barry Langille, R. R. #1, Brookfield, N. S.  
 William Lanterman, Prospect, Halifax Co., N. S.  
 Beverly Lawrence, Mouth of Keswick, R. R. #3, N. B.  
 Roland LeBlanc, Box 165, R. R. #1, Saulnierville, N. S.  
 Patricia Leger, 189 Acadia Street, St. Joseph, N. B.  
 Steven Livingstone, 111 Mason Rd., Charlottetown, P. E. I.  
 H. John Lundrigan, 24 Queen St., Corner Brook, Nfld.  
 Melodie Martin, 818 Main St., Woodstock, N. B.  
 Brigitte Marut, Vernon P. O., P. E. I.  
 Wendell Matthew, 33 Glover's Shore Rd., Wilmot, P. E. I.  
 Ralph Mattie, R. R. #1, Afton, N. S.  
 Bruce Mitham, 131 Pickwood Cres., Pointe Claire, P.Q.  
 Jeffrey Mitton, Northport, N. S.  
 Peter Morse, 120 Cottage St., Berwick, N. S.  
 Brian Mundle, Rexton, N. B.  
 Judith Murdoch, R. R. #4, New Glasgow, N. S.  
 James Murray, R. R. #1, Hampton, N. B.  
 Gerard MacDonald, R. R. #1, Heatherton, N. S.  
 Paul McFate, Golden Grove Rd., R. R. #4, Saint John, N. B.  
 John McGuire, Millville, N. B.  
 George McIntosh, Bath, N. B.  
 A. Bruce MacKenzie, North Wiltshire, P. E. I.  
 James McLaughlin, Box 650, Grand Falls, N. B.  
 Sarah MacLean, East Bay, N. S.  
 Arnold Nabuurs, Montague, R. R. #3, P. E. I.  
 Bernard Nabuurs, Cardigan, R. R. #2, P. E. I.  
 Richard Nauss, 42 MacLean St., Truro, N. S.  
 Patrick Newman, 3447 Agricola St., Halifax, N. S.  
 Reginald Oram, Box 215, Dark Cove, B. Bay, Nfld.  
 Jeffery O'Reilly, 9 Morrison Place, St. John's, Nfld.  
 Andre Paradis, 41 Point Park Dr., Riverview, N. B.  
 Larry Pedersen, Box 333, Amherst, N. S.  
 David Pike, 14 Colville St., St. John's, Nfld.  
 Daniel Poirier, 90 Harewood Cres., Fredericton, N. B.  
 Clarence Power, Charlottetown, R. R. #5, P. E. I.  
 Roderick Pratt, St. Peter's, P. E. I.  
 Teresa Radvanyi, R. R. #4, Montague, P. E. I.  
 Shari Reeleder, Glassville, R. R. #2, N. B.  
 Ernest Riggs, 55 Roche St., St. John's, Nfld.  
 J. Randolph Ross, 76 Miller Rd., Truro, N. S.  
 David Rowan, Fredericton, R. R. #1, N. B.  
 Michael Sandeson, R. R. #1, Truro, N. S.  
 Anne Savage, R. R. #1, Grand Falls, N. B.  
 Thomas Schaad, R. R. #1, Tatamagouche, N. S.  
 Henry Schenkels, R. R. #2, Boiestown, N.B.

James Schoonhoven, 64 Prospect Ave., Kentville, N. S.  
 Clifton Smith, Box 214, Centreville, N. B.  
 W. Gregory Stevens, Truro, R. R. #5, N. S.  
 Bonita Stirling, R. R. #2, Wolfville, N. S.  
 Peter Strong, R. R. #7, Woodstock, N. B.  
 Jocelyn Surette, Dorchester Crossing, R. R. #1, N.B.  
 Robert Thistle, 261 Richmond St., Charlottetown, P.E.I.  
 Ross Thomas, R. R. #7, Woodstock, N. B.  
 Brian Thornton, Woodstock, R. R. #1, N. B.  
 Peter Toner, R. R. #1, Grand Falls, N. B.  
 Sheilah Toogood, Brierly Brook, R. R. #2, Antigonish, N. S.  
 John Underhay, Souris, R. R. #4, P. E. I.  
 Louis Van Gaal, Aroostook Junction, R. R. #1, N. B.  
 John Van Zutphen, R. R. #7, Antigonish, N. S.  
 Peter Verleun, R. R. #3, Montague, P. E. I.  
 Gerald Vermeulen, Milford Station, N. S.  
 Susan Walkom, 48 Brewster Street, Riverview, N. B.  
 John Webster, Cardigan, P. E. I.  
 Glenda White, Bedeque, P. E. I.  
 David Williams, 16 High St., Bedford, N. S.  
 Elizabeth Woodill, 10 Fourth St., Dartmouth, N. S.  
 Carolyn Wright, 25 Hillwood Cres., Halifax, N.S.  
 Heather Wyatt, Site 4, Box 6, R. R. #1, Windsor Junction,  
 N.S.

### Second Year—Class of '77

Karen Arsenault, 171 Dorchester St., Charlottetown, P.E.I.  
 C. Edward Boyd, Bath, R. R. #1, N.B.  
 David Britten, 2045 Poplar St., Halifax, N. S.  
 Betty Brown, R. R. #1, Kentville, N. S.  
 James Brown, 2 Veazey St., St. Stephen, N. B.  
 M. Marleen Campbell, Souris, Box 77, P. E. I.  
 J. Gerard Carmichael, Albany, R. R. #2, P. E. I.  
 David Carragher, Kelly's Cross, P. E. I.  
 Kevin Cashin, 16 Campbell St., North Sydney, N. S.  
 M. Shannon Chandler, Maxwellton, R. R. #1, N. S.  
 James Colbourne, 81 McLean St., Truro, N.S.  
 Charles Connors, R. R. #1, Dorchester Crossing, N. B.  
 John Craswell, Albany, R. R. #1, P. E. I.  
 Paul Crouse, R. R. #6, Bridgewater, N. S.  
 John Cummiskey, Charlottetown, R. R. #5, P. E. I.  
 R. Joyce Faulkner, 375 Main St., Middleton, N. S.  
 Roger Freeman, Bear River, R. R. #1, N. S.  
 Blaine Friars, Box 224, Sussex, N. B.  
 Paul Gaunce, Sussex, R. R. #1, N. B.

Robert Glover, Murray River, R. R. #1, P. E. I.  
 Allen Hamilton, Florenceville, R. R. #1, N. B.  
 Dale Henderson, R. R. #2, River John, N. S.  
 Sandra Higgins, 1507 Highland St., Holliston, Mass. 01746  
 Karen Hoddinott, 10 Bank Rd., Grand Falls, Nfld.  
 Charles Jacob, R. R. #1, Bloomfield, N. B.  
 Kerry Jay, Kinkora, P. E. I.  
 Marcus Jeffers, R. R. #1, Oxford, N. S.  
 Maureen Kelly, 1731 King's Rd., Sydney, N. S.  
 Harry Knight, Young's Cove Rd., N. B.  
 Roderick Lutes, 30 Garden Hill Ave., Moncton, N. B.  
 Louis Melanson, Haute-Aboujagane, R. R. #1, N. B.  
 W. Kier Miller, Amherst, R. R. #4, N. S.  
 Wilfred Moase, Kensington, R. R. #4, P. E. I.  
 Richard Moskovits, 40 Tobin Cres., St. John's, Nfld.  
 Allan MacDonald, R. R. #2, Hatfield Point, N. B.  
 Maurice MacDonald, York P. O. R. R. #1, P. E. I.  
 P. Marie MacDonald, Wellington, R. R. #1, P. E. I.  
 Elton MacKay, 53 Washington Ave., Natick, Mass. 01769  
 Richard MacKenzie, New Wiltshire, R. R. #2, P. E. I.  
 Nelson MacKinnon, Richmond, R. R. #1, P. E. I.  
 Michael McLaughlin, Grand Falls, R.R. #1, N. B.  
 John McLellan, Maitland, R. R. #1, N. S.  
 Jennifer Neilson, R. R. #6, Fredericton, N. B.  
 J. Anne Parsons, Bloomfield, B. Bay, Nfld.  
 Pauline Percy, Granville Ferry, N. S.  
 John Purdy, Truro, R. R. #1, N. S.  
 Donald Rafuse, Waterville, N. S.  
 Trevor Richardson, R. R. #4, New Glasgow, N. S.  
 Gary Robinson, Winsloe, R. R. #1, P. E. I.  
 James Sceviour, Box 132, R. R. #1, Lewisporte, Nfld.  
 William Smit, R. R. #3, Waterville, N. S.  
 Deborah Smith, R. R. #1, Tantallon, N. S.  
 Gerard Toole, South Melville, Bonshaw, P. E. I.  
 Gerard Van Dyk, R. R. #1, Caledonia, N. S.  
 Jacob Verboom, R. R. #2, Middle Musquodoboit, N. S.  
 Randall Wallace, Box 26, Pointe Du Chene, N. B.  
 Pius Walsh, Mount Stewart, R. R. #5, P. E. I.  
 Gary Wood, Alexandra, P. E. I.

## **Final Year—Class of '77**

Carollyn Ainsworth, Box 66, Fredericton, N. B.  
Beverley Bevin, 309 Windmill Rd., Dartmouth, N. S.  
Brian Cochrane, 27 Frink St., Saint John, N. B.  
Matthew Cooke, 2 George St., Trenton, N. S.  
Glenys Cox, 28 Fairview Dr., Truro, N. S.  
Bradford Crewe, 35A Mountain Ave., Dartmouth, N. S.  
Deborah DeAdder, R. R. #2, Kentville, N. S.  
Laurel d'Entremont, Lower West Pubnico, N. S.  
Anne Gray, Box 45, R. R. #2, Redbank, N. B.  
Karen Hardy, Alberton, P. E. I.  
Caye Harris, Box 99, Bear River, N. S.  
Randy Hatt, 20 James St., Kentville, N. S.  
Brenda Heron, Charlottetown, R. R. #5, P. E. I.  
Anita Jackson, Amherst, R. R. #2, N.S.  
Carol Macomber, R. R. #1, Maitland, N. S.  
Gary Meyer, Centreville, R. R. #2, N. S.  
Gary Myrden, 32 West Valley Rd., Corner Brook, Nfld.  
Brian McCullum, Sussex, R. R. #1, N. B.  
Ian MacDonald, 90 Stoneybrook Court, Clayton Park,  
Halifax, N. S.  
George MacLeod, St. Stephen, R. R. #6, N. B.  
Earl Perry, Summerside, R. R. #1, P. E. I.  
James Peters, Box 186, Bear River, N. S.  
Norman Phinney, Reserve Mines, N. S.  
Andrea Pinhey, Box 332, Milton, N. S.  
Evelina Smith, 56 Balsam Circle, Lower Sackville, N. S.  
Stephen Stewart, 26 Spring St., Amherst, N. S.  
Brian Webster, Cambridge Station, N. S.  
Vicki Weldin, 25 Raymond Dr., Lower Sackville, N. S.

## **SPECIAL STUDENTS**

Holly Aumack, Prospect, N. S.  
Neil Brodie, 55 Pictou Rd., Truro, N. S.  
Karen Denton, N. S. A. C., Truro, N. S.  
Leonard Eaton, N. S. A. C., Truro, N. S.  
Eric George, Box 623, Truro, N. S.  
Susan Gray, R. R. #2, South Ohio, N. S.  
Deborah Hannam, N. S. A. C., Truro, N. S.  
Jane Hebb, N. S. A. C., Truro, N. S.  
Michael Henderson, Brookfield, N. S.  
David Hoar, 30 College Rd., Truro, N. S.  
Brian Ives, Box 356, Stellarton, N. S.

## TECHNOLOGY DIPLOMA

### First Year—Class of '78

John Besaw, Box 44, Lourdes, Port au Port, Nfld.  
Verena Bishop, 17 Wallingham St., Dartmouth, N. S.  
M. Cornelia Canton, 112 Main St., Truro, N. S.  
Karen Cheverie, Elmira P. O., P. E. I.  
Lena Christie, R. R. #5, Antigonish, N. S.  
Barbara Cooper, 26 Foulis Ct., Saint John, N. B.  
Brian Crouse, 184 Victoria Rd., Bridgewater, N. S.  
Nancy Crowe, R. R. #5, Truro, N. S.  
Faye Darling, Rothesay, R. R. #4, N. B.  
Patricia Dwyer, 106 Richard St. East, Saint John, N. B.  
Roger Finnigan, R. R. #2, Rogersville, N. B.  
Marlene Fraser, Box 256, Montague, P. E. I.  
Wendy Harris, O'Leary, R. R. #1, P. E. I.  
Sandra Hennigar, R. R #2, Wolfville, N. S.  
Janice Lever, 676 George Street, New Waterford, N. S.  
Kevin Little, Box 14, Middleton, N. S.  
Sheri Morehouse, 53 Palmetter Ave., Kentville, N. S.  
Margaret Murphy, 324 Highland St., Moncton, N. B.  
Condon MacDonald, 18 Homecrest Terrace, Halifax, N. S.  
K. Moreen MacDonald, R. R. #2, Westville, N. S.  
Gayle McLaughlin, Andover, R. R. #2, N. B.  
Mary MacLean, 56 Brunswick St., Truro, N. S.  
Ian Neil, Maitland, R. R. #1, N. S.  
R. David Nodwell, 618 Franklyn St., Halifax, N. S.  
Jocelyn Peake, 50 St. Clair Ave., Charlottetown, P. E. I.  
Brian Phelan, Box 428, Middleton, N. S.  
A. Lynette Power, Belfast, R. R. #3, P. E. I.  
Susan Priebe, 614 Graham Ave., Apt. 101, Fredericton, N.B.  
Jan Robertson, 120 Borden St., Sydney, N. S.  
Barbara Topp, 1019 Kings Road, Sydney River, N. S.  
Audrey Venedam, Box 86, R. R. #7, Antigonish, N. S.  
S. Gwen Williams, 25 Harris Rd., Dartmouth, N. S.  
Linda Youngson, Box 605, R. R. #2, Wolfville, N. S.

George Long, N. S. A. C., Truro, N. S.  
Brian Mahoney, N. S. A. C., Truro, N. S.  
Margaret Moorhouse, St. Peters Bay, P. E. I.  
Timothy MacAfee, 15 Louisville St., Oromocto, N.B.  
Cynthia MacLeod, R. R. #3, Sydney, N. S.  
John Nancekivell, General Delivery, Shubenacadie, N. S.  
William Oulton, N. S. A. C., Truro, N. S.  
Alexander Patterson, N. S. A. C, Truro, N. S.  
Abhul Rahman, Box 159, River John, N. S.  
M. Christine Reaman, R. R. #1, Brookfield, N. S.  
David Rundle-Woolcock, 2329 Princess Place, Halifax, N. S.  
Heather Scott, 301 Northumberland St., Fredericton, N. B.  
Donald Sutherland, R. R. #1, Brookfield, N. S.  
Anthonie Van den Ende, N.S.A.C., Truro, N.S.  
Gary Wallace, R. R. #2, Stewiacke, N. S.



*Notes*

