A. D. Ells

NOVA SCOTIA AGRICULTURAL COLLEGE

CALENDAR 1975 - 1976

SEVENTIETH ANNUAL

CALENDAR

OF THE

NOVA SCOTIA
AGRICULTURAL COLLEGE
TRURO

UNDER

The Nova Scotia Department
of Agriculture and Marketing

1975 - 1976

INDEX

APPLICATION FOR ADMISSION (1975)

NOVA SCOTIA AGRICULTURAL COLLEGE

Date.....

Name in full.....

Address.....

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 1974-75 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 .....
Plant Science –	First year	Second year .....

Technology:

Biology Laboratory –	First year	Second year .....
Chemistry Laboratory –	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 .....
	Third 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

1975

JULY 1975						
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 1975						
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 1975						
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 1975						
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 1975						
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 1975						
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	-	-	-
-	-	-	-	-	-	-

1976

JANUARY 1976						
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 1976						
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	-	-	-	-	-	-
-	-	-	-	-	-	-

MARCH 1976						
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 1976						
S	M	T	W	T	F	S
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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 1976						
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 1976						
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 – 1975–1976

1975

August 25	Refresher Course for selected First Year students commences at 1:30 p.m.
September 3-5	Supplemental examinations.
September 8	Registration for students registering for the first time
September 9	Registration for returning students
September 10	Lectures commence at 8:15 a.m.
October 6	Thanksgiving Day. No classes
November 7-9	Mid-term break. No classes
December 8-19	First term examinations

1976

January 5	Second term lectures commence at 8:15 a.m.
February 28-March 7	Mid term break for individual study.
April 16	Good Friday. No classes
April 17-28	Second term examinations
May 5	Graduation exercises

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

- for Refresher Course students, the morning of August 25
- for students who have to write supplemental examinations, after dinner on September 2
- for all new students, after dinner on September 7.
- for all other students, after dinner on September 8.

Any student who wishes to use residence facilities before the times set down above will be charged at the rate of $3.00 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 4, 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. (Punjabi), 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)

D.A. BROWNING, B.Sc. (Agr. Eng.), McGill

E. M. HEBB

Director of Athletics

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

Placement Officer

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

Business Manager
R. F. McEWAN

Secretary
MRS. A. MARIE HARTIGAN

FACULTY

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

Agricultural Engineering
D. E. CLARK, B. S. A. (Toronto), M. S. A. (Guelph)
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)
Assistant Professor
W. CARSON, B. Sc. (Idaho), M. Sc. (Idaho), Ph.D. (Idaho), P.Eng.
Visiting Lecturer

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)
Lecturer

D. C. CROBER, B. Sc. (Agr.) (McGill), M. Sc. (McGill), Ph.D. (British Columbia) (on special assignment)
Associate Professor

G. V. M. MOWBRAY, D. V. M. (Toronto)
Visiting Lecturer
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)
Assistant Professor
L. E. LEVY, B. Sc.,(Acadia), M. Sc. (Acadia)
Lecturer

Chemistry

W. M. LANGILLE, B. Sc. (Acadia), M. Sc. (McGill)
Associate 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. McCONNELL, B. Sc. (Agr.) (McGill)
Assistant Professor

A. S. PAYNE, B. Sc. (Agr.) (McGill), M. Sc. (McGill)
Lecturer
K. S. MacLEAN, B. Sc. (Dalhousie), M.Sc. (McGill)
Associate Professor

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

T. C. GUNN, B. S. A, (Toronto), M. Sc. (Connecticut)
Sessional Lecturer (N. S. Dept. of Agriculture)

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

E. M. HEBB
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)
Assistant 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)
Lecturer

F. J. WRAY, B. Sc. with honours (Leeds), M. Sc. (Leeds), D. Phil. (Oxford)
Assistant Professor

J. A. MORLEY, B. S. (Texas Tech), M S. (Texas Tech), N.P.D.
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, 1974, and February 16, 1976. This also applies to students who have applied for Canada Student Loans and have not had them finalized.

DEGREE COURSES

Payments due September 8, 1975.	
Tuition	$275
Board and lodging	$440
Caution and laboratory deposit	$ 20
Students' Council	$ 45
Medical fee	$ 6
	$786
Payments due January 5, 1976.	
Tuition	$275
Board and lodging	$500
	$775
Books (estimated), September 8, 1975.	$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
Free to residents of the Atlantic Provinces, the governments of which are sharing operating costs of the Technician Courses.

Payments due September 8, 1975	
Board and lodging	$440
Caution and laboratory deposit	$ 20
Students' Council	$ 45
Medical fee	$ 6
	$511
Payments due January 5, 1976	
Board and lodging	$500
Books (estimated), September 8, 1975	$ 75

The United Students' Council has approved of a fee of $6.00 for the medical services fund to be collected from all students at the 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 $12.00 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 $20.00 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 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 students enrolled in the Degree and Technical Courses loans of up to $2400. 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 for the Nova Scotians are available at the Department of Education, Box 578, Halifax, N. S. Residents of other provinces should apply to the issuing authority at their provincial capital.

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.

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 Col-

lege 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 1975-76 credits towards a science degree in Agriculture and an engineering degree in Agriculture, four technician courses, technologist courses and vocational short courses will be offered.

During the seventy years of its existence the Nova Scotia Agricultural College has had very close affiliations with the Ontario Agricultural College (now a 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 three years of a five-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.

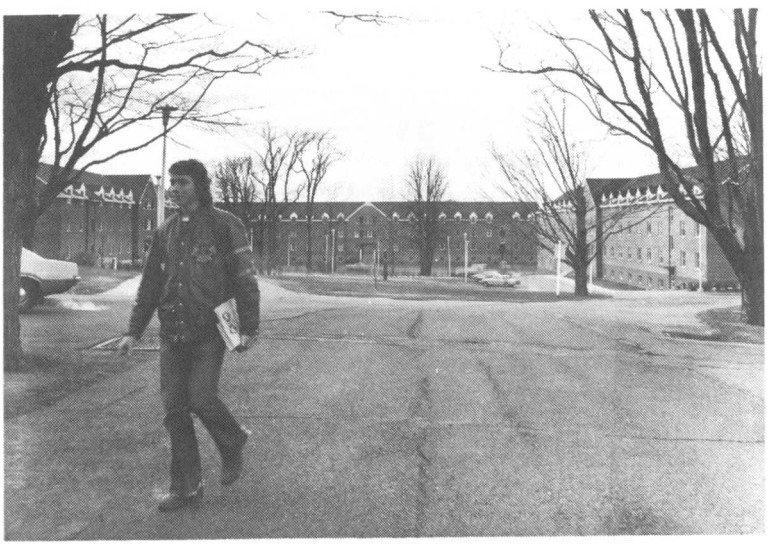
To the student who wishes to farm, to accept employment in a farm-related industry, or to engage in professional agriculture, the College offers courses designed to better fit him for the line of endeavor he wishes to follow.

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 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 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 and Chapman House provide living accommodations for male and female students.



The Faculty reserves the right to withhold any first year course 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.

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

The various courses arranged for the 1975-76 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.

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 has a branch in Bible Hill.

Telegrams:

Branches of both Canadian National Telegraphs and Canadian Pacific Telegraphs 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


NSAC

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 Office 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 ia 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.

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

All illnesses must be reported through the nurse to the Registrar's office.

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

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, pillows, 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 $2.00 fee is charged for registration. Vehicles

brought to campus during the year will be registered with the Grounds Superintendent.

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 Grounds Superintendent.

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) parking lot at Poultry House,
   (c) behind Cumming Hall.
   All 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 Grounds Superintendent.

9. One week after registration, warnings will be issued to unregistered vehicle owners. Further violations of regulations shall be subject to a fine of $2.00 for a second violation and $5.00 for a third or subsequent violation. Fines are payable at the college business office. Repeated offenders may have their cars removed and parking privileges suspended at the discretion of the parking committee.

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, and volleyball.

(b) Intercollegiate Athletics: The women's division competes in the intermediate (J.V.) division of the Atlantic Women's Intercollegiate Athletic Association. The major team sports are field hockey and basketball. The women also compete in a local broomball league. The men's division of athletics compete in the Nova Scotia College Conference. 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: 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 subjects 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.

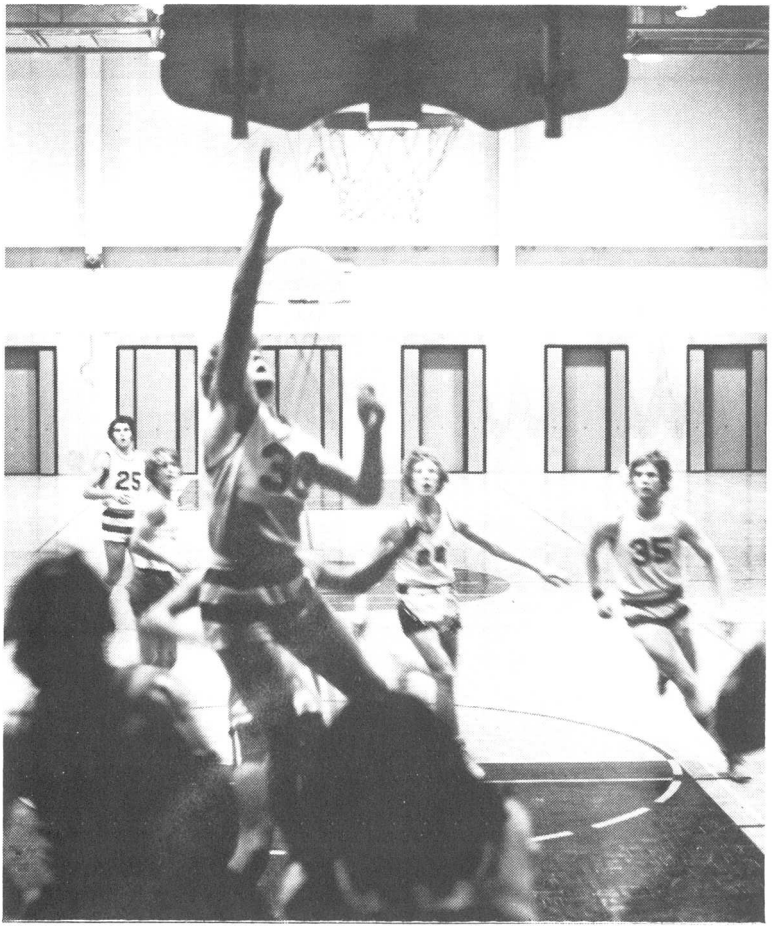
THE COLLEGE WINTER FAIR

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 Manage-

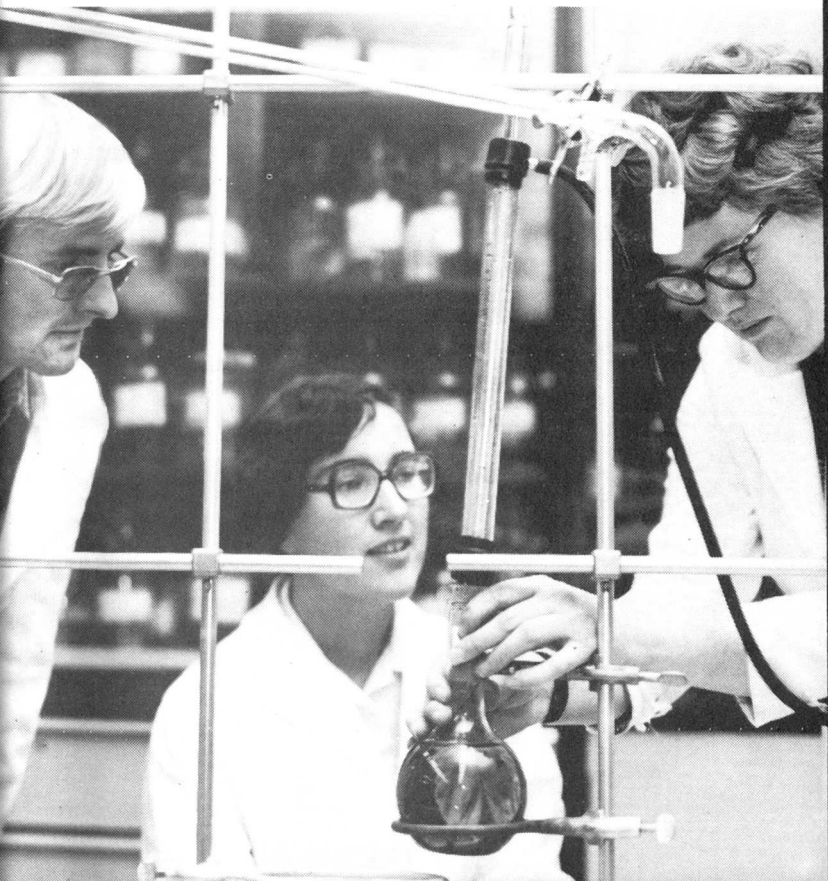
ment and a series of educational demonstration booths.

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 three years of a five 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

All candidates for admission must:

(a) 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.

(b) present a satisfactory medical certificate dated not more than thirty days prior to registration;

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

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 20.

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. per examination.

SYLLABUS

AGRICULTURAL SCIENCE

The requirement for a diploma is completion of Semesters I and II, English 250, and sufficient additional credits to make up a total of at least sixty-two credits.

SEMESTER I (Required)	Credits
English 200 (Modern Literature and Writing)	3
Mathematics 100 (Calculus I)	3
Chemistry 100 (Principles)	3
Biology 101 (Botany)	3
Plant Science 100 (Principles of Crop Production)	3
*Biology 100	
*Physics 100	

*If both Biology and Physics were satisfactorily completed in Grade XII (N.S., N.B., P.E.I.) or its equivalent, an elective course may be chosen. All first year students must elect one of several Physical Education programs offered.

SEMESTER II (Required)	Credits
Economics 150 (Principles of Economics)	3
Mathematics 150 (Calculus II)	3
Chemistry 150 (Introductory Organic)	3
Biology 150 (Zoology)	3
Animal Science 150	3
Physics 150	3

SEMESTERS III & IV	Credits
Agriculture 150 (History of Agriculture)	2
Engineering 252 (Surveying)	2

Engineering 203 (Farm Mechanization)	2
Engineering 202 (Farm Structures)	3
Animal Science 200 (Selected studies in Animal Science)	3
Biology 200 (Cell Biology)	3
Biology 202 (Microbiology for Engineers)	3
Biology 250 (Microbiology)	3
Biology 255 (Plant Physiology)	3
Biology 256 (Histology)	3
Biology 302 (Principles of Ecology)	3
Chemistry 200 (Biochemistry I)	3
Chemistry 201 (Introduction to Soil Science)	3
Chemistry 250 (Biochemistry II)	3
Economics 250 (Economics of Agriculture)	3
Economics 200 (Principles of Marketing)	3
Economics 210 (Principles–Micro)	3
Economics 101 (Accounting)	3
Economics 204 (Production Economics)	3
Economics 254 (Farm Management)	3
English 250 (Canadian Literature and Public Speaking)	3
Genetics 200 (Introduction to Genetics)	3
Genetics 250 (Advanced Genetics)	3
Mathematics 250 (Statistics and Experimentation)	3
Physics 200 (Electrical Phenomena)	3
Plant Science 250 (Greenhouse and Floriculture)	3
Sociology 100, 150 or 151	3
Communications 255 (Communications, Extension Methods)	3

SYLLABUS

AGRICULTURAL ENGINEERING

The requirement for a diploma is successful completion of all courses listed.

SEMESTER I

Biology 101 (Botany)	3
Chemistry 102 (Engineering Chemistry I)	3
English 200 (Modern Literature and Writing)	3

Mathematics 100 (Calculus I)	3
Physics 102	3
Plant Science 101	2

SEMESTER II

Biology 150 (Zoology)	3
Chemistry 152 (Engineering Chemistry II)	3
Economics 150 (Introductory)	3
English 250 (Canadian Literature and Public Speaking)	3
Mathematics 150 (Calculus II)	3
Physics 152	3

SEMESTER III

Engineering 200 (Principles and Applications of Orthagonal Projection)	2
Engineering 201 (Introductory Statics)	2
Engineering 202 (Agricultural Structures)	3
Engineering 203 (Agricultural Mechanization)	2
Mathematics 201 (Mathematics for Engineers I)	3
Physics 201	3
Biology 202 (Microbiology)	3

SEMESTER IV

Engineering 250 (Graphics in Design)	2
Engineering 251 (Advanced Statics)	2
Engineering 252 (Surveying)	2
Mathematics 251 (Mathematics for Engineers II)	3
Animal Science 150	3
Physics 251	3

SEMESTER V

Engineering 300 (Strength of Materials)	3
Engineering 301 (Dynamics of Particles)	2
Engineering 302 (Fluid Mechanics)	3
Mathematics 300 (Differential Equations I)	3
Physics 300 (Electric Circuits I)	3
Chemistry 201 (Principles of Soil Science)	3

SEMESTER VI

Engineering 350 (Advanced Strength of Materials)	3
Engineering 351 (Dynamics of Rigid Bodies)	3
Engineering 352 (Thermodynamics)	3
Mathematics 350 (Differential Equations II)	3
Physics 350 (Electric Circuits II)	3
Economics 250 (Economics of Agriculture)	3
Mathematics 250 (Statistics)	3

DESCRIPTION OF COURSES

The following courses are arranged for the 1974-1975 academic year. The Faculty reserves the right to make any revisions or additions which may be necessary.

Agriculture 150: **History of Agriculture**
Instructor: **Prof. Shuh**

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.

Spring Semester – 2 lecs. per week

Animal Science 150: **Introductory Animal Science**
Instructors: **Profs Matthewson, Sefton 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.

Both Semesters – 3 lecs. and 2 labs. per week

Text: Cole, INTRODUCTION TO LIVESTOCK PRODUCTION

Animal Science 200: **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, poultry production, animal breeding systems and animal nutrition.

Fall Semester – 3 lecs. per week

Biology 100: **Principles of Biology**
Instructor: **Prof. Levy**

An introduction to Biology and laboratory work, with emphasis on the basic biological concepts to give an understanding of the organization and operation of biological systems. These will include the requirements, acquisition, utilization and transfer of energy, basic structure and coordination of activities, reproduction, genetics and evolution.

Fall Semester – 3 lecs. and 4 labs. per week
Text: Gerking, BIOLOGICAL SYSTEMS

Biology 101: **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

Biology 150: **The Animal Kingdom**
Instructor: **Prof. Neary**

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.

Spring Semester – 3 lecs. and 4 labs. per week
Text: Storer and Usinger, GENERAL ZOOLOGY

Biology 200: **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.

Texts: Novikoff and Holtzman: CELLS AND ORGANELLES; Loewy and Siekevitz: CELL STRUCTURE AND FUNCTION.

Biology 202: **Microbiology for Engineers**

Instructor: **Prof. Porth**

A general survey of the microbial world with emphasis on types of microorganisms, 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

Text: McKinney, MICROBIOLOGY FOR SANITARY ENGINEERS.

Biology 250: **Microbiology**

Instructor: **Prof. Porth**

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

Spring Semester – 3 lecs. and 3 labs. per week

Text: Pelczar and Reid, MICROBIOLOGY (3rd Edition)

Biology 255: **Plant Physiology**

Instructor: **Prof. Eaton**

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

Spring Semester – 3 lecs. and 2 labs. per week

Text: to be announced

Biology 256: **Histology**

Instructor: **Prof. Levy**

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.

Spring Semester – 2 lecs. and 4 labs. per week.

Biology 302: **Principles of Ecology**

Instructor: **Prof. Eaton**

An introductory course to give ecological principles at the level of the individual, the population and he community. The interactions between organisms and the physical environment will be discussed; along with the various types of communities that will be found in the Atlantic Provinces.

Fall Semester – 2 lecs. and 2 labs. per week

Text: Odum, FUNDAMENTALS OF ECOLOGY

Chemistry 100: **Chemical Principles**

Instructor **Prof. MacConnell**

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

Fall semester – 3 lecs. and 4 labs. per week

Text: Masterton and Slowinski, CHEMICAL PRNCIPLES (third edition)

Chemistry 102: **Engineering Chemistry I**
Instructor: **Prof. MacLean**

A study of solid, liquid and gaseous fuels, nuclear power, atmospheric pollution, lubrication and lubricants, brake luid and antifreeze and the chemistry of their applicatio1 to engineering problems.

Fall Semester – 3 lecs. and 4 labs. per week
Text: Munroe, CHEMISTRY IN ENGINEERING

Chemistry 150: **Organic Chemistry**
Instructor: **Prof. Hawley**
Prerequisite: **Chemistry 100**

A study of basic classes of organic compounds including alkanes, alkenes, alkynes, petroleum and petrochemcals, cycloparaffins, alcohols, aldehydes, ketones, alkyl halides, monocarboxylic acids, acid halides, acid anhydrides, alts, amides, ethers and amines.

Spring Semester – 3 lecs. and 4 labs. per week
Text: Morrison and Boyd, ORGANIC CHEMISTRY (3rd edition)

Chemistry 152: **Engineering Chemistry II**
Instructor: **Prof. MacLean**
Prerequisite: **Chemistry 102**

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

Spring Semester – 3 lecs. and 4 labs. per week
Text: Munroe, CHEMISTRY IN ENGINEERING

Chemistry 200: **Biochemistry I**
Instructor: **Prof. MacConnell**
Prerequisite: **Chemistry 150**

A classical study of carbohydrates, lipids, amino acids, proteins, nucleic acids, vitamins, hormones and enzymes

Fall Semester – 3 lecs. and 4 labs. per week
Text: Conn and Stumpf, OUTLINES OF BIOCHEMISTRY (third edition)

Chemistry 201: **Introduction to Soil Science**
Instructor: **Prof. Langille**
Prerequisite: **Chemistry 100, 150**

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 and land use.

Fall semester – 3 lecs. and 4 labs. per week

Text: Millar, Turk and Foth, FUNDAMENTALS OF SOIL SCIENCE (fourth edition)

Chemistry 250: **Biochemistry II**
Instructor: **Prof. MacConnell**

Enzyme kinetics and mechanisms of enzyme action, biological oxidation and reduction, bioenergetics, metabolism of carbohydrates, triglycerides and nitrogen balance, selected biosynthesis and metabolism control mechanisms.

Spring Semester – 3 lecs. and 4 labs. per week

Text: Conn and Stumpf, OUTLINES OF BIOCHEMISTRY (third edition)

Communications 255: **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.

Spring Semester – 3 lecs. per week

Economics 101: **Introductory Accounting**
Instructor: **Prof. Arnfast**

This is a study of the basic principles and procedures 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 – 1 lec. and 2 labs per week

Text: Meigs, Johnson and Blazouske, ACCOUNTING, THE BASIS FOR BUSINESS DECISIONS

Economics 150: **Principles of Economics**
Instructor: **Prof. Arnfast**

An introduction to the study of economics. The course is designed to acquaint the student with the main elements of economic theory; emphasis will be placed on the application of theory to the Canadian economy. The following topics will be discussed in the course: the Canadian economic system, national income analysis, money and banking, government spending and taxation, the price system, competition labor in Canada, trade and commercial policy.

Spring Semester – 3 lecs. per week

Economics 200: **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

Economics 204: **Production Economics**
Instructor: **Prof. Tait**

A study of the economic principles and methods of analyzing production and resource use in agriculture. Decision making by means of economic theory, linear programming, and budgeting, is emphasized.

Fall Semester – 2 lecs. and 4 labs. per week

Economics 210: **Principles of Economics – Micro**
Instructor: **Prof. Tait**

The course studies the principles of decision-making by individuals and firms touching on supply, demand, product pricing and resource allocation, market mechanisms and competition, consumer choice, factor pricing and income distribu-

tion, etc. The course will make extensive use of contemporary readings and articles to illustrate the real world application of economics. The emphasis will naturally be a Canadian one and will make frequent references to agriculture for specific examples and cases.

Fall Semester – 3 lecs. per week

Economics 250: **Economics of Agriculture**
Instructor: **Prof. Arnfast**

A study of the agricultural sector of the Atlantic Region vis-à-vis agriculture in Canada as a whole; agricultural development and policies affecting agriculture. This includes the analysis of historical patterns, agricultural resource base, current problems and opportunities for economic growth in agriculture in the Region. The major emphasis is placed on the search for a meaningful agricultural policy and for development programs through which the objectives of this policy might be realized.

Spring Semester – 3 lecs. per week

Economics 254: **Farm Management**
Instructor: **Prof. Tait**

The principles and methods of analyzing and organizing farm and farm-related businesses are examined. Practical problems associated with size of business, balance in organization, labor efficiency, and production systems, are included. Sources of capital and techniques in managing each category of credit are studied. Farm accounting, business analysis and budgeting are included.

Spring Semester – 3 lecs. and 2 labs. per week

English 200
Instructor: **Prof. Sanger**

British and American authors: the critical examination of ideas and values developed by writers and their relationship to the past and present is emphasized.

Instruction is also given in bibliographical and library techniques, essays and report writing.

Fall semester – 3 lecs. per week
Texts: E. M. Foster, THE LONGEST JOURNEY; H. D. Thor-

eau, WALDEN; Joseph Conrad, THE SECRET AGENT; F. Scott Fitzgerald, THE GREAT GATSBY; N. S. A. C. STYLE MANUAL. Selected poems will also be added.

English 250
Instructor: **Prof. Sanger**

Canadian authors: as much as the size of enrolment permits, instruction is to take place in seminars as well as lectures. Students present papers for discussion on Canadian authors, both English and French (in English translation).

Books by Morley Callaghan, Hugh MacClennan Ringuet, and Gabrielle Roy are to be studied. Students examine a wide range of contemporary Canadian poetry and are encouraged to develop and explain their own tastes. Those who possess the interest and ability have the opportunity tostudy and translate French Canadian poetry.

Spring semester – 3 periods per week

Engineering 200: **Principles and Applications of Orthogonal Projection**
Instructor: **Prof. Adams**

Freehand sketching and instrument drawing are used to explore the fundamental principles of projection and toapply 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 – 1 lec. and 3 labs. per week
Text: A. S. Levens, GRAPHICS-ANALYSIS AND CONCEPTUAL DESIGN

Engineering 201: **Introductory Statics**
Instructor: **Prof. MacAulay**

This course deals with a study of forces acting onparticles and on rigid bodies in two and three dimensions with equilibrium and distributed forces (centroids and centers of gravity). The Vector approach is used and Vector methods are used in problem solution.

Fall Semester – 3 lecs. per week

Text: Beer & Johnson, VECTOR MECHANICS FOR ENGINEERS: STATICS, McGraw-Hill (latest edition)

Engineering 202: **Agricultural Structures**
Instructor: **Prof. Adams**

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

Fall Semester – 2 lecs. and 2 labs. per week
Reference text: FARM BUILDING STANDARDS

Engineering 203: **Agricultural Mechanization**
Instructor: **Prof. Clark**

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.

Fall Semester – 1 lec. and 2 labs. per week
Text: Kepner, Bainer and Barger, PRINCIPLES OF FARM MACHINERY

Engineering 250: **Graphics in Design**
Instructor: **Prof. Adams**

Graphical techniques are applied to vecor 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.

Spring Semester – 1 lec. and 3 labs. per week
Text: A. S. Levens, GRAPHICS-ANALYSIS AND CONCEPTUAL DESIGN

Engineering 251: **Advanced Statics**
Instructor: **Prof. MacAulay**

A continuation of Engineering 201 dealing with analysis

of structures, frames and machines, forces in beams, friction, moments of inertia and method of virtual work.

Spring Semester – 3 lecs. per week

Text: Beer & Johnson, VECTOR MECHANICS FOR ENGINEERS: STATICS, McGraw-Hill (latest edition)

Engineering 252: **Surveying**
Instructor: **Prof. MacAulay**

This course covers the use and adjustment of surveying instruments, measurements of distance, differential and profile levelling in transit traverses and running simple curves.

Spring Semester – 2 lecs. and 2 labs. per week

(May require at least a week after examinations in field exercises, depending on the weather during the term.)

Text: Kissam, SURVEYING PRACTICE

Engineering 300: **Strength of Materials**
Instructor: **Prof. Saxon**
Prerequisite: **Engineering 201**

An introduction to engineering materials and their properties. The stress-strain relationship for tension, compression and shear, the shear, bending moment and deflection in beams are topics covered. Emphasis is placed on problem solving.

Fall Semester – 3 lecs. per week

Text: Higdon, Ohlsen, Stiles, Weese, MECHANICS OF MATERIALS, (2nd edition)

Engineering 301: **Dynamics of Particles**
Insturctor: **Prof. Carson**

A course dealing with rectilinear and curvilinear motion of particles, kinetics of particles, force mass and acceleration, work and energy, impulse and momentum.

Fall Semester – 2 lecs. and 1 lab. per week

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

Engineering 302: **Fluid Mechanics**
Instructor: **Prof. 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, friction and Reynolds number.

Fall Semester – 3 lecs. and 1 lab. per week

Text: Streeter, FLUID MECHANICS, (5th edition), McGraw-Hill

Engineering 350: **Advanced Strength of Materials**
Instructor: **Prof. Saxon**

The course consists of the analytical treatment of torsion in shafts, statically indeterminate beams, columns and combined stresses. Use is made of testing facilities to demonstrate the properties of materials.

Spring Semester – 3 lecs. per week

Text: Higdon, Ohlsen, Stiles, Weese, MECHANICS OF MATERIALS, (2nd edition)

Engineering 351: **Dynamics of Rigid Bodies**
Instructor: **Prof. Carson**

A course dealing with Kinematics and Kinetics of rigid bodies; forces, accelerations, energy and momentum methods are studied. Introduction to Kinetics in three dimensions and elementary mechanical vibrations.

Spring Semester – 2 lecs. and 1 lab. per week

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

Engineering 352: **Thermodynamics**
Instructor: **Prof MacAulay**
Prerequisite: **Mathematics 251 and Physics 251**

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 vapours. Including the properties of liquids and vapours, processes and cycles.

Spring Semester – 3 lecs. and 1 lab per week

Text: VanWylen & Sonntag, FUNDAMENTALS OF CLASSI-

CAL THERMODYNAMICS, Wiley
Mark, THERMODYNAMICS, Prentice Hall

Genetics 200: **Introduction to Genetics**
Instructor: **Prof. Padmanathan**
Prerequisite: **Biology 100**

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

Fall Semester – 3 lecs. and 2 labs. per week
Text: Gardner, PRINCIPLES OF GENETICS

Genetics 250: **Advanced Genetics**
Instructor: **Prof. Padmanathan**
Prerequisite: **Genetics 200**

A detailed study of the genetic material, gene action and population genetics with emphasis on agricultural applications of genetic knowledge.

Spring Semester – 2 lecs. and 2 labs. per week
Texts: Gardner, PRINCIPLES OF GENETICS
Brewbaker, AGRICULTURAL GENETICS

Mathematics 100: **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

Mathematics 150: **Calculus and Analytic Geometry II**
Instructor: **Prof. Fraser**

A continuation of Mathematics 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 Mathematics

Physical Education
Instructors: **Profs. Marchant and Hebb**

The physical education program is an elective program available to all students. The program provides each student with an opportunity to develop skill and understanding in a variety of selected sport activities that will serve the individual throughout life.

Block times within the timetable are scheduled and are announced at the commencement of the academic year.

Physics 100: **Introductory Physics**
Instructor: **Prof. Saxon**

An introductory course for those not having any previous physics. This course covers mechanics, heat, light and sound.

The laboratory emphasizes the experimental foundations of physics, and gives the student an appreciation of the scientific method.

Fall Semester – 3 lecs. and 4 labs. per week

Physics 102
Instructor: **Prof. Smith**

An introductory course for Engineers covering statics, kinematics, dynamics, conservation of energy, conservation of momentum, gas law, thermal properties of matter and mechanical properties of matter. Basic theories are developed and verified through experimental laboratory exercises.

Fall Semester – 3 lecs. and 4 labs. per week

Text: Bueche, PRINCIPLES OF PHYSICS

Physics 150: **Modern Physics**
Instructor: **Prof. Smith**

A treatment of the conceptional foundations including mass, length, time, kinematics, Newton's laws, frames of reference, relative motion including Galileon Relativity and

A more rigorous study of the theory of limit, the derivative and the integral together with a study of infinite series, curves, vectors, polar coordinates, three-dimensional analytic geometry and an introduction to computer programming.

Fall Semester – 3 lecs. per week

Text: A.W. Goodman, MODERN CALCULUS WITH ANALYTIC GEOMETRY

Mathematics 251: **Mathematics for Engineers II**
Instructor: **Prof. Fraser**
Prerequisite: **Mathematics 100, 150**

A continuation of Mathematics 201 covering differential calculus of functions of several variables, multiple integration and linear algebra.

Spring Semester – 3 lecs. per week

Text: A.W. Goodman, MODERN CALCULUS WITH ANALYTIC GEOMETRY

Mathematics 300: **Differential Equations I**
Instructor: **Prof. Fraser**
Prerequisite: **Mathematics 201, 251**

A study of differential equations covering methods of solution of first and second order equations in some detail, applications to problems in various fields, series solutions, higher order linear equations and Laplace Transforms.

Fall Semester – 3 lecs. per week

Text: Boyce and DiPrima, ELEMENTARY DIFFERENTIAL EQUATIONS AND BOUNDARY VALUE PROBLEMS

Mathematics 350: **Differential Equations II**
Instructor: **Prof. Fraser**
Prerequisite: **Mathematics 201, 251**

A continuation of Mathematics 300 dealing with systems of equations, numerical methods, boundary value problems, Fourier series and an introduction to partial differential equations.

Spring Semester – 3 lecs. per week

Text: Boyce and DiPrima, ELEMENTARY DIFFERENTIAL EQUATIONS AND BOUNDARY VALUE PROBLEMS.

Physical Education
Instructors: **Profs. Marchant and Hebb**

The physical education program is an elective program available to all students. The program provides each student with an opportunity to develop skill and understanding in a variety of selected sport activities that will serve the individual throughout life.

Block times within the timetable are scheduled and are announced at the commencement of the academic year.

Physics 100: **Introductory Physics**
Instructor: **Prof. Saxon**

An introductory course for those not having any previous physics. This course covers mechanics, heat, light and sound.

The laboratory emphasizes the experimental foundations of physics, and gives the student an appreciation of the scientific method.

Fall Semester – 3 lecs. and 4 labs. per week

Physics 102
Instructor: **Prof. Smith**

An introductory course for Engineers covering statics, kinematics, dynamics, conservation of energy, conservation of momentum, gas law, thermal properties of matter and mechanical properties of matter. Basic theories are developed and verified through experimental laboratory exercises.

Fall Semester – 3 lecs. and 4 labs. per week

Text: Bueche, PRINCIPLES OF PHYSICS

Physics 150: **Modern Physics**
Instructor: **Prof. Smith**

A treatment of the conceptional 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 conceptional 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.

Spring Semester – 3 lecs. and 4 labs. per week

Physics 152
Instructor: **Prof. Saxon**
Prerequisite: **Physics 102**

An introductory course covering wave motion, sound, electricity and magnetism, light and selected topics in modern physics.

Use is made of calculus in the solving of physcal problems.

Spring Semester – 3 lecs. and 4 labs. per week

Text: Bueche, PRINCIPLES OF PHYSICS

Physics 200: **Electrical Phenomena**
Instructor: **Prof. Smith**

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

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

Fall Semester – 3 lecs. and 4 labs. per week

Physics 201
Instructor: **Prof. Smith**

A course for second year engineering students making use of calculus for development of theory and problem solving. Topics include statics, plane motion, work and energy, harmonic motion and hydrodynamics. Laboratory exercises are designed to give the student opportunity to apply the scientific method to verification of phenomena.

Fall Semester – 3 lecs. and 4 labs. per week

Text: Sears & Zemansky, UNIVERSITY PHYSICS, (4th edition)

Physics 251
Instructor: **Prof. Saxon**
Prerequisite: **Physics 201**

A course for second year engineering students covering heat measurement, heat transfer, thermodynamics, wave motion, acoustics, light, optics.

Spring Semester – 3 lecs. and 4 labs. per week

Text: Sears & Zemansky, UNIVERSITY PHYSICS, (4th edition)

Physics 300: **Electricity**
Instructor: **Prof. Saxon**
Prerequisite: **Mathematics 201, 251**

Physics of electric fields, potential, capacitance, motion of ions in electric fields, current and resistance, D.C. measuring instruments and methods. The magnetic field, Ampere's law , Faraday's law, inductance, magnetic properties of matter.

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

Physics 350: **Electric Circuits**
Instructor: **Prof. Smith**
Prerequisite: **Mathematics 201, 251**

D.C. circuit analysis using Kirchoff's laws, superposition theorem, Thevenin's theorem, Norton's theroem, reciprocity, Dalta-Wye transformation, Two, three and four terminal networks. Transient effects in inductance and capacitance circuits

Sinusoidal currents and voltages, alternating current circuits, including resonance and A.C. bridges. Semiconductor devices and simple circuits.

Spring Semester - 3 lecs. and 2 labs. per week

Physics 300: **Electric Circuits I**
Instructor: **Prof. Saxon**
Prerequisite: **Mathematics 201, 251**

Physics of electric fields, potential, capacitaice, motion of ions in electric fields, current and resistance Kirchoff's laws and analysis of D. C. circuits, solution of circuits by cyclic currents, superposition, reciprocity and Thevenin's Theorem and applications, D. C. measuring instruments and methods.

Fall Semester – 3 lecs. and 2 labs. per week

Physics 350: **Electric Circuits II**
Instructor: **Prof. Smith**
Prerequisite: **Mathematics 201, 251**

The magnetic field, Ampere's Law, Faraday's Law, Inductance, Magnetic properties of Matter, alternatng currents, alternating current circuit analysis, including complex impedance, series and parallel circuits, power and power factor, resonance.

Spring Semester – 3 lecs. and 2 labs. per week

Plant Science 100: **Principles of Crop Production**
Instructor: **Prof. Bubar**

General principles underlying adaptation, inprovement, culture and utilization of agronomic and horticultural crop plants. Special attention is paid to crops grown inthe Atlantic Provinces with laboratory work on individual crops and discussion of principles in relation to the crops gown 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

Plant Science 101: **General Plant Science**
Instructor: **Prof. Shuh**

An introductory course in plant science for engineering students. The course will deal with the identiication and production of some of the more common crop plnts. Special attention will be given to the problems related to seeding,

cultivation and harvesting of these crops.

Fall Semester – 2 lecs. and 2 labs. per week

Text: Martin and Leonard, PRINCIPLES OF FIELD CROP PRODUCTION

Plant Science 250: **Greenhouse Crop Production and Floriculture**

Instructors: **Profs. Wray and Badcock**

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.

Spring Semester – 3 lecs. and 2 labs. per week

Sociology 100

Instructor: **Prof. MacEachern**

Through assigned readings and in lectures, students are given an insight into basic sociological concepts. Emphasis is placed on man's antiquity, man's nature, and man in community with specific emphasis on marriage and the family. Consideration is given as well to an examination of specific sub-cultures.

Fall Semester - 3 lecs. per week

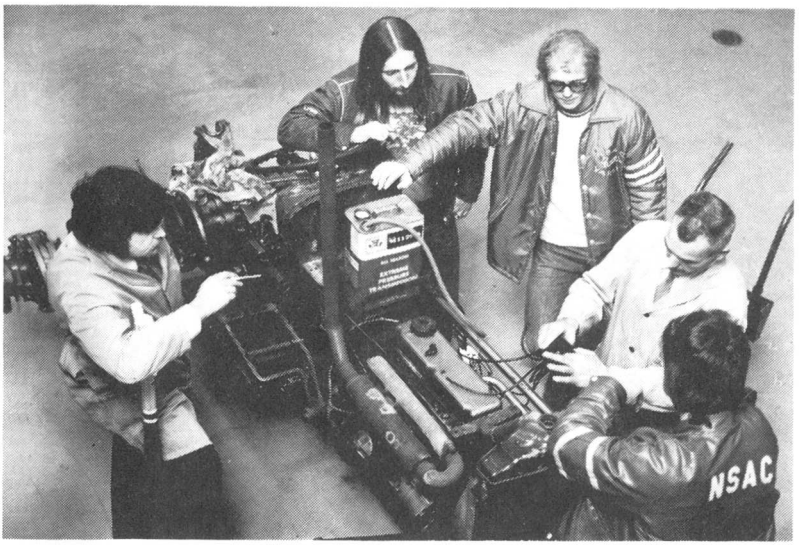
Texts: Shinn, R., THE TANGLED WORLD, Berger, P., INVITATION TO SOCIOLOGY, Streib, G.F., THE CHANGING FAMILY and other assigned readings.

Sociology 150
Instructor: **Prof. MacEachern**

The examination of society with emphasis on man in community through consideration of human values, morals and decision making. An in-depth study is made on the theme of Death and Dying.

Spring Semester - 3 lecs. per week

Texts: Shinn, R., THE TANGLED WORLD, Adams, I., THE POVERTY WALL., Frankl, V., MAN'S SEARCH FOR MEANING?, Kubler-Ross., E., ON DEATH AND DYING, and other assigned readings.



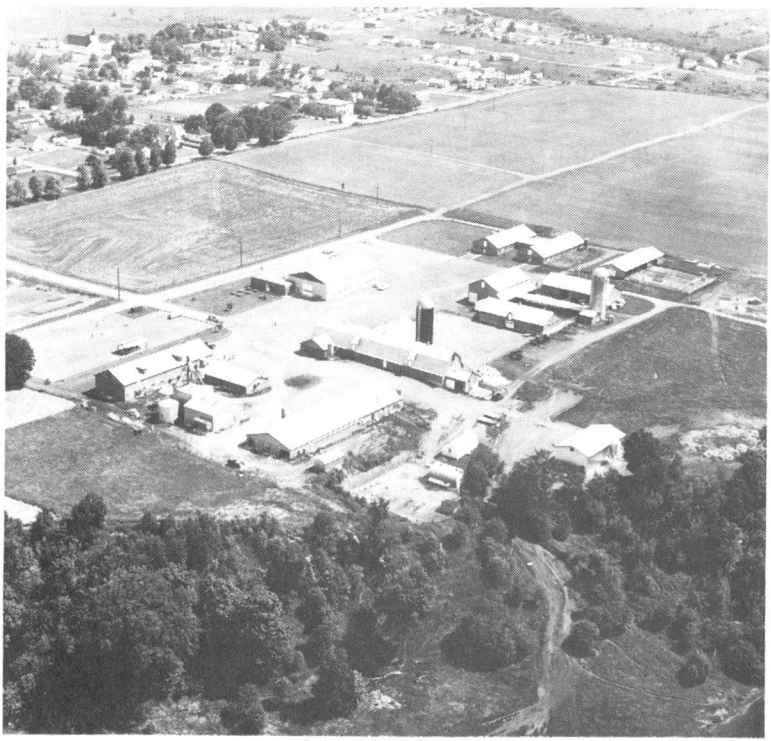
Sociology 151: (Personnel Management)

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.

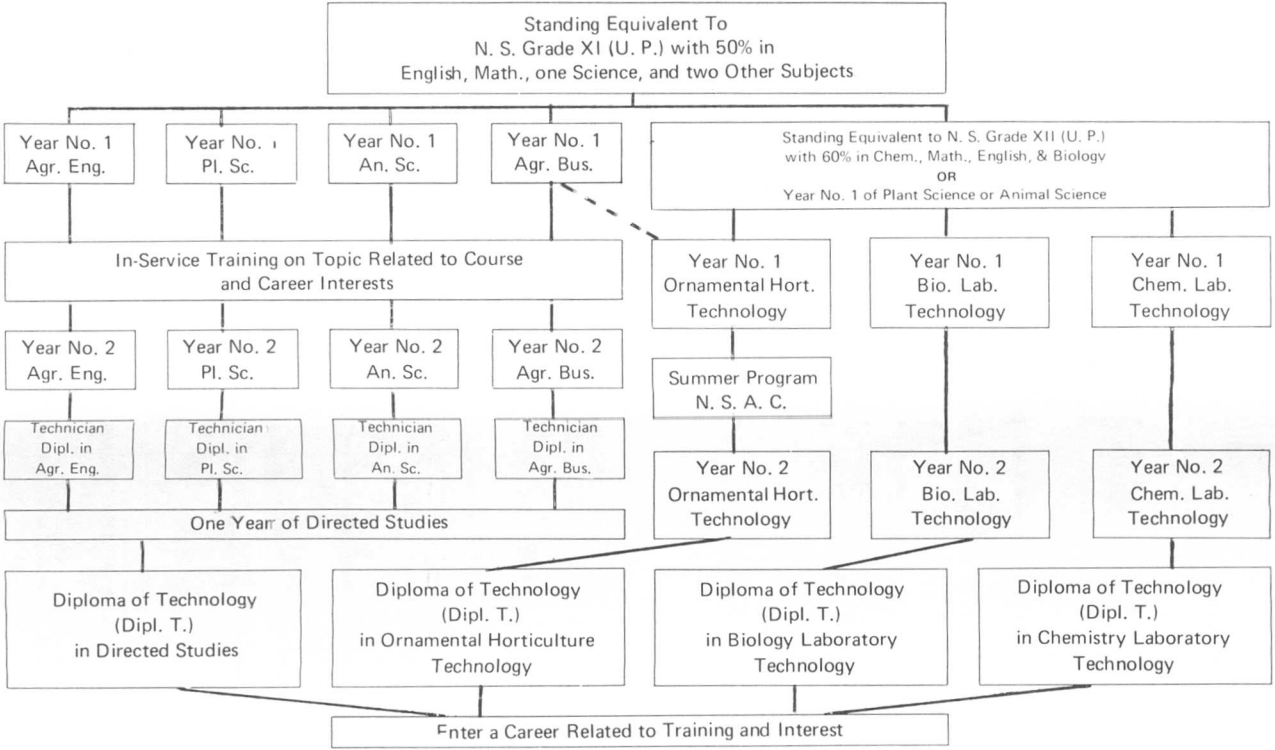
Both semesters - 3 lecs. per week

Texts: Megginson, HUMAN RESOURCES: CASES & CONCEPTS; Rohrer, Hibler & Repogle, MANAGING THROUGH INSIGHT.



TECHNICIAN AND TECHNOLOGY COURSES

TECHNICAL STUDIES AT THE NOVA SCOTIA AGRICULTURAL COLLEGE



TECHNICAL 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 and Diplomas of Technology.

1. TECHNICIAN COURSES

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, 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 M10.

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.

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 M11(b).

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. For the calculation of an average, the mark in a full year subject is doubled.

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 26 to September 7. The additional cost will be for books and for board and lodging only.

Supplemental Examinations

A student in a Technician Course may write a supplemental examination in a maximum of three full subjects if his combined average for all subjects is above 50% and the

mark in the failed subject(s) is at least 35%. A term subject will be rated as a half subject.

Provided that the disqualifying conditions stated above do not apply, a student may write one supplemental examination in a subject, either in June or September immediately following the failure. A member of the graduating class may, if he so elects, write a supplemental examination in a failed subject of the first term of the final year before January 31 immediately following.

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.

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 20.

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. The allowance will be credited, by the College, to each student's account at the beginning of the first and second terms.

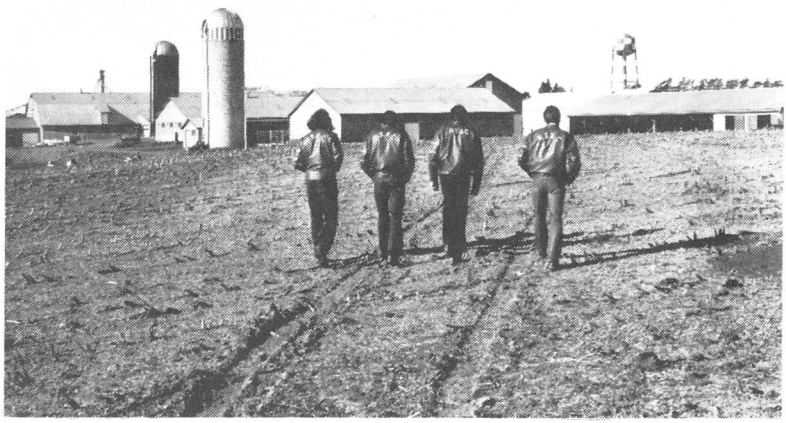
CAREER INTRODUCTION PROGRAM

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.

A. AGRICULTURAL BUSINESS

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.



AGRICULTURAL BUSINESS SYLLABUS
FIRST ACADEMIC YEAR

		First Term		Sec. Term	
		Lec.	Lab.	Lec.	Lab.
E 10	English	3		3	
M 10	Appliable Mathematics	3		3	
C 11	Soils (Physics and Chemistry)	2	2	2	2
C 10	Basic Chemistry	2	2	2	2
B 10(a)	Introductory Biology	3	4		
B 13(b)	Advanced Introductory Biology			2	4
AE 10	Agricultural Engineering	2	2	2	2
AB 10	Accounting	2	2	2	2
AB 11	Economics	3		3	
	Physical Education (Elective program to be arranged)				
AB 12(b)	Work Simplification – one week				

SECOND ACADEMIC YEAR

		First Term Lec.	Lab.	Sec. Term Lec.	Lab.
100	Sociology	3			
151	Sociology	3			
204	Production Economics	2	4		
254	Farm Management			3	2
AB23(b)	Business Administration			3	
AB21(a)	Applied Marketing	1	4		
AB24(b)	Applied Farm Management			1	4
AE20	Power and Machinery	2	2	2	2
*255	Communications			3	
	OR				
*150	Sociology			3	
*PS20	Field Crops Production	2	2	2	2
AB29	Project				
	Either (A) the Plant Science group or (B) the Livestock Production group indicated below:				
(A)					
PS26(a)	Vegetable Production	3	4		
	AND				
PS28(b)	Potato Production			2	2
	OR				
PS30(b)	Advanced Field Crop Production			2	1
(B)					
*AS10(a)	Livestock Production (Ruminant Animals)	3	2		
	AND				
AS12(b)	Livestock Production (Poultry and other non-ruminant animals)			3	2

*Students may apply to take a substitute production course if approved by appropriate department head and if the substituted course is not in conflict with the timetable.

B. ANIMAL SCIENCE

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.

ANIMAL SCIENCE SYLLABUS

FIRST ACADEMIC YEAR

		First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
E 10	English	3		3	
M 10	Appliable Mathematics	3		3	
C 10	Basic Chemistry	2	2	2	2
C 11	Soils (Physics and Chemistry)	2	2	2	2
B 10(a)	Introductory Biology	3	4		
B 13(b)	Advanced Introductory Biology			2	4
AE 10	Agricultural Engineering	2	2	2	2
AS10(a)	Livestock Production (ruminant animals)	3	2		
AS12(b)	Livestock Production (poultry and other non-ruminant animals)			3	2
AS 11(b)	Animal Husbandry Skills				2
	Physical Education (Elective program to be arranged)				
AB 12(b)	Work Simplification – one week				

SECOND ACADEMIC YEAR

		First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
100	Sociology	3			
150	Sociology			3	
	or				
151	Sociology			3	
PS 20	Field Crops Production	2	2	2	2
AS 21(a)	Milk and Dairy Products	2	2		
AS 23(b)	Meat and Livestock Products			2	2
AS 27(a)	Animal Physiology	2	2		
AS 28(b)	Animal Pathology			2	2
AS 24(b)	Animal Breeding			3	
AE 20	Power and Machinery	2	2	2	2
AB 11	Economics	3		3	
AS 20(a)	Animal Nutrition	3	2		
AS 22(a)	Breeds and Selection	1	2		
AS 25(b)	Seminar			1	
AS 29	Project				

C. PLANT SCIENCE

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

		First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
E10	English	3		3	
M10	Appliable Mathematics	3		3	
C10	Basic Chemistry	2	2	2	2
C11	Soils (Physics and Chemistry)	2	2	2	2
B10(a)	Introductory Biology	3	4		
B13(b)	Advanced Introductory Biology			2	4
AE10	Agricultural Engineering	2	2	2	2
PS11	Plant Science Skills		2		4
B20(a)	Plant Identification	2	2		
AB12(b)	Work Simplification	One Week			
	Physical Education	(Elective program to be arranged)			

SECOND ACADEMIC YEAR

		First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
100	Sociology (Required)	3			
B21(b)	Plant Pathology			2	3
B22(b)	Plant Physiology			2	2
B11(a)	Entomology	2	2		
AB10	Accounting	2	2	2	2
PS29	Project	Equivalent to one-half day per week for one term			
	One of the following blocks is to be elected				
BLOCK A – Ornamental and Turf					
PS27	Ornamental Horticulture	2	2	2	2
PS23(a)	Introductory Turf Management	2	2		
PS25(b)	Turf Management	1	2	1	2

		First Term Lec.	Lab.	Sec. Term Lec.	Lab.
AE15(a)	Surveying	2	2		
AE27(a)	Horticultural Machinery	2	2		
151	Sociology			3	
BLOCK B – Greenhouse, Fruit and Garden Crops					
PS24	Greenhouse crops		2		2
PS21	Fruit Production	1	2	1	2
AE27(a)	Horticultural Machinery	2	2		
AE21(b)	Electrical Controls			1	4
PS26(a)	Vegetable Production	3	4		
151	Sociology			3	
BLOCK C – Crop Production					
PS20	Field Crops Production	2	2	2	2
PS26(a)	Vegetable Production	3	4		
PS28(b)	Potato Production			2	2
PS30(b)	Advanced Field Crops Production			2	1
AE20	Power and Machinery	2	2	2	2

D. AGRICULTURAL ENGINEERING

The Nova Scotia Agricultural College offers a two year course in Agricultural Engineering to help students prepare themselves for careers as Agricultural Engineering technicians in farm-related firms and services. The course is composed of both on-compus instruction and in-service training.

AGRICULTURAL ENGINEERING SYLLABUS

FIRST ACADEMIC YEAR

		First Term Lec.	Lab.	Sec. Term Lec.	Lab.
E10	English	3		3	
M10	Appliable Mathematics	3		3	
PS12	Soils & Crops	2	2	2	2
B10(a)	Introductory Biology	3	4		
M11(b)	Physics			2	2
AS10(a)	Livestock Production	3	2		
AS12(b)	Livestock Production			3	2

		First Term Lec.	Lab.	Sec. Term Lec.	Lab.
AE11(b)	Properties of Materials			1	2
AE12	Drafting		4		4
AE13	Shopwork	1	4	1	4
AE15(a)	Surveying	2	2		
AE16(b)	Preliminary Agricultural Engineering			3	
AB12(b)	Work Simplification	One week			
	Physical Education				

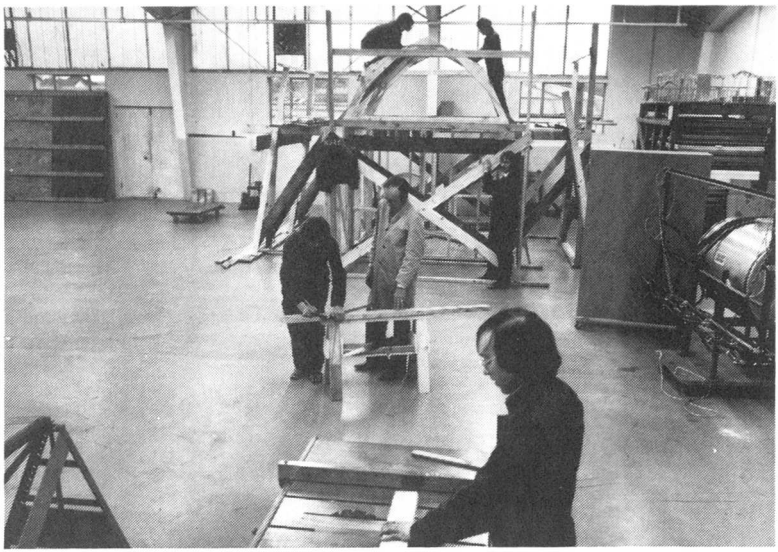
SECOND ACADEMIC YEAR

		First Term Lec.	Lab.	Sec. Term Lec.	Lab.
151	Sociology			3	
AE25(b)	Oil Hydraulics			2	2
AE26(a)	Soil & Water Management	2	2		
AE22(a)	Farm Buildings	2	4		
AE23(a)	Farm Power	2	4		
AE24(a)	Farm Machinery	2	4		
AE21(b)	Electrical Controls			1	4
AB10	Accounting	2	2	2	2
	OR				
AB11	Economics	3		3	
AE29	Project*	Equivalent to ½ day/ week for 1 semester			
	Two of the following:				
AE32(b)	Advanced Farm Buildings			1	4
AE33(b)	Advanced Farm Power			1	4
AE34(b)	Advanced Farm Machinery			1	4

Required Electives 2 one-semester courses

DESCRIPTION OF COURSES

The following descriptions of all subjects in the four courses leading to Technician Diplomas are arranged in order of subject groups. The Faculty reserves the right to make any revisions or additions which may be necessary. The duration of lecture and laboratory periods is 45 minutes.



AB10: **Accounting**
Instructor: **Prof. Arnfast**

This is a study of the basic principles and procedures relevant to the accounting function of a busines. Emphasis will be on procedure. Project work with authentic farm and farm-related business records will be used in the course to give the student a working knowledge of the above-mentioned principles and procedures. At the conclusion of the course the student should be able to set up and maintain a bookkeeping system and prepare financial reports for a small to medium size business.

Agr. Bus., lst year, both terms – 2 lecs. and 2 labs. per week. Pl. Sc., Agr. Eng., both terms – 2 lecs. and 2 labs. per week.

AB11: **Economics**
Instructor: **Prof. Tait**

An introduction to the study of Economics. Emphasis is placed on the Canadian economy and its problems. Topics will include national accounts, public finance, money and

banking, international trade, demand and supply, analysis, market structure and theory of the firm.

Ag. Eng., An. Sc., 2nd year, both terms – 3 lecs. per week. Agr. Bus., lst year, both terms – 3 lecs. per week.
Text: Muriel Armstrong, THE CANADIAN ECONOMY AND ITS PROBLEMS

AB 12 (b): **Work Simplification**

This is a practical course in the organized use of common sense to find an easier and better way to do a job and avoid waste of time, money, materials, equipment and other important factors.

Agr. Bus., An. Sc., Pl. Sc., Ag. Eng., 1st year, 1 week, time to be arranged

AB 21 (a): **Applied Marketing**
Instructor: **Prof. Ells**

Students visit a series of marketing organizations to learn the nature and extent of their operation, and the involvement of the organization in other segments of the agricultural industry. Causes of waste, spoilage, and low quality, and how costs of marketing are established are determined in several of the visits. Managers of the marketing organizations visited assist in the instruction.

Agr. Bus., 2nd year, 1st term – 1 lec. and 4 labs. per week (half day)

AB23(b): **Business Administration**
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, leins, insurance and marketing boards. Emphasis will be placed on relating the above topics to farm and farm-related business.

Agr. Bus., 2nd year, 2nd term – 3 lecs. per week

AB 24(b): **Applied Farm Management**
Instructor: **Prof. Gunn**

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.

Agr. Bus., 2nd year, 2nd term – 1 lec. and 4 labs. per week

204: **Economics (Production Economics)**
Instructor: **Prof. Tait**

A study of the economic principles and methods of analyzing production and resource use in agriculture.

Decision making by means of economic theory, linear programming, and budgeting is emphasized.

Agr. Bus., 2nd year, 1st term – 2 lecs. and 4 labs. per week

254: **Economics (Farm Management)**
Instructor: **Prof. Tait**

The principles and methods of analyzing and organizing farm and farm-related businesses are examined. Practical problems associated with size of business, balance in organization, labor efficiency, and production systems, are included. Sources of capital and techniques in managing each category of credit are studied. Farm accounting, business analysis and budgeting are included.

Agr. Bus., 2nd year, 2nd term – 3 lecs. and 2 labs. per week

Communications 255: **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.

Agr. Bus., 2nd year, 2nd term – 3 lecs. per week

AE 10: **Introduction to Agricultural Engineering**
Instructor: **Prof. Townsend**

Lectures include a study of farm structures as we find them today. Special emphasis is placed on layouts, materials of construction, environmental control, water systems and farmstead mechanization.

The course also deals with electricity as it is used to produce heat, light and power on the farm.

Laboratory periods include instruction in the use of drafting instruments, lettering, orthographic drawing and sketching, isometric drawing and sketching, sections, reading blueprints, and computing bills of materials. Tours are conducted of farm buildings to substantiate the material covered in lectures.

For Ornamental Horticulture students the emphasis is placed on drawing, therefore, they have fewer farm building tours in the Laboratory part of this course.

Agr. Bus., An. Sc., Pl. Sc., 1st year, both terms – 2 lecs. and 2 labs per week

AE 11 (b): **Properties of Materials**
Instructor: **Prof. Adams**

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.

Ag. Eng., 1st year, 2nd term – 1 lec. and 2 labs. per week

AE 12: **Drafting**
Instructor: **Prof. Townsend**

A course which helps the student develop his skills in using drawing instruments, drafting machines, printing machines, tracing tables, planimeters, etc.

Lettering, orthographic drawing and sketching, pictorial drawings and sketching, sections and developments are studied.

The course concludes with practice in working drawings, contours and profile exercises, map reading and conputing areas.

Ag. Eng., lst year, both terms – 4 labs. per week

AE 13: **Shopwork**
Instructors: **Messrs. Burr & Morash**

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 sheas, Box and Pan brake and forming rolls; also use of portable wood and metal working tools. Students are exposed to the running of a metal lathe and milling machine. Considerable welding is

done using electric, acetylene and spot welding machines. Some practice is given on the hard-to-weld metals such as aluminium and magnesium alloys. Identification and heat

treatment of metals are also studied.

Agr. Eng., lst year, both terms – 1 lec. and 4 labs. per week

AE 15 (a): **Surveying**
Instructor: **Prof. MacAulay**

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

Pl. Sc., 2nd year, 1st term; Ag. Eng., 1st year, 1st term – 2 lecs. and 2 labs. per week

Text: Kissam, SURVEYING PRACTICE (latest edition)

AE16(b): **Preliminary Agricultural Engineering**
Instructors: **Profs. Adams, Clark and Taylor**

An introduction to the types and function of buildings, power units and machinery used on modern farms. It will give an overview of Agricultural Engineering and will show how it relates to other branches of the agricultural industry.

Ag. Eng., lst year, 2nd term – 3 lecs. per week

AE 20: **Power and Machinery**
Instructors: **Prof. Clark and Mr. Taylor**

An introduction to the operation, maintenance and selection of farm machinery used in modern agriculture. Tillage, application and harvesting equipment along with tractor power units and their hydraulic systems will be studied.

Ag. Bus., An. Sc., Pl. Sc. 2nd year, both terms – 2 lecs. and 2 labs. per week

AE 21 (b): **Electrical Controls**
Instructor: **Prof. Townsend**

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.

Ag. Eng., Pl. Sc., 2nd year, 2nd term – 1 lec. and 4 labs per week

AE22(a): **Farm Buildings**
Instructor: **Prof. Adams**

A more detailed study will be made of the farm building subjects introduced in the Preliminary Agricultural Engineering course AE16(b). Construction of building elements will be studied, calculations 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 continued with a study and calculation of insulation values.

Ag. Eng., 2nd year, 1st term – 2 lecs. and 4 labs. per week

Text: CANADIAN CODE FOR FARM BUILDINGS (FARM BUILDING STANDARD) 1970

AE23(a): **Farm Power**
Instructor: **Mr. Taylor**

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.

Ag. Eng., 2nd year, 1st term – 2 lecs. and 4 labs. per week

AE24(a): **Farm machinery**
Instructor: **Prof. Clark**

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.

Ag. Eng., 2nd year, 1st term – 2 lecs. and 4 labs. per week

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

AE25(b): **Oil Hydraulics**
Instructor: **Prof MacAulay**

The basic theory of operation and performance of hydraulic pumps, control valves, cylinders and motors. Emphasis is placed on the operating characteristics of hydraulic equipment and its selection for agricultural use.

Ag. Eng., 2nd year, 2nd term – 2 lecs. and 2 labs. per week

AE26(a): **Soil and Water Management**
Instructor: **Prof MacAulay**

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.

Pl. Sc., Ag. Eng., 2nd year, lst term – 2 lecs. and 2 labs. per week

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

AE 27(a): **Horticultural Machinery**
Instructors: **Profs. Clark, MacAulay and Mr. Taylor**

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.

Pl. Sc., 2nd year, 1st term – 2 lecs. and 2 labs. per week

AE32(b): **Advanced Farm Buildings**
Instructor: **Prof. Adams**
Prerequisite: **AE22(a)**

The study of buildings carried out in Farm Buildings AE22(a) will be continued with emphasis on the understanding of the design and planning aspects. 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.

Ag. Eng. 2nd year, 2nd term – 1 lec and 4 labs per week

Text: CANADIAN CODE FOR FARM BUILDINGS (FARM BUILDING STANDARDS) 1970

AE33(b): **Advanced Farm Power**
Instructor: **Mr. Taylor**
Prerequisite: **AE23(a)**

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.

Ag. Eng., 2nd year, 2nd term – 1 lec. and 4 labs. per week

AE34(b): **Advanced Farm Machinery**
Instructor: **Prof. Clark**
Prerequisite: **AE24(a)**

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

Ag. Eng., 2nd year, 2nd term – 1 lec. and 4 labs. per week

AS 10(a): **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.

An. Sc., Ag. Eng., lst year, lst term; Ag. Bus., 2nd year, lst term – 3 lecs. and 2 labs. per week

AS 11 (b): **Animal Husbandry Skills**
Instructor: **Prof. Mathewson**

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

An. Sc., 1st year, 2nd term – 2 labs. per week

AS 12(b): **Livestock Production (poultry and other 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.

An. Sc., Ag. Eng., 1st year, 2nd term; Ag. Bus., 2nd year, 2nd term – 3 lecs. and 2 labs. per week

AS 20 (a): **Animal Nutrition**
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. A comparative study of ruminant and monogastric digestion is made.

An. Sc., 2nd year, 1st term – 3 lecs. and 2 labs. per week

AS 21 (a): **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.

An. Sc., 2nd year, 1st term – 2 lecs. and 2 labs. per week

AS 22 (a): **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.

An. Sc., 2nd year, 1st term – 1 lec. and 2 labs. per week

AS 23 (b): **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.

An. Sc., 2nd year, 2nd term – 2 lecs. and 2 labs. per week

AS 24 (b): **Animal Breeding**
Instructor: **Prof. Mathewson**

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

An. Sc., 2nd year, 2nd term – 3 lecs. per week

AS 25 (b): **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.

An. Sc., 2nd year, 2nd term – 1 lec. per week

AS 27 (a): **Animal Physiology**
Instructor: **Prof. Crober**

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

An. Sc., 2nd year, 1st term – 2 lecs. and 2 labs. per week

AS 28 (b): **Animal Pathology**
Instructor: **Prof. Mowbray**

Systems of sanitation and hygiene, pronoting good health, are discussed. The causes, symptoms, prevention, control of common animal diseases and ailments outlined.

An. Sc., 2nd year, 2nd term – 2 lecs. and 2 labs. per week

B10(a): **Introductory Biology**
Instructor: **Prof. Eaton**

II. TECHNOLOGY COURSES

The Nova Scotia Agricultural College offers courses designed to help Technicians gain more intensive study so that they may become more proficient in their chosen fields of agricultural endeavour. These studies lead to a Diploma of Technology (Dipl. T.) in directed studies. Specialized courses are also available 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.

A. Technology Studies for Graduate Technicians

A candidate who has received his Technician Diploma in Agricultural Business, Agricultural Engineering, Animal Science or Plant Science or who has equivalent standing may apply for a year of directed study leading to a Diploma of Technology. If 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 two full year subjects, additional projects, and laboratory experience.

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

(a) AB 30: Advanced Business Management,
(b) C 30: Plant Nutrition,
(c) M 30 (a): Basic Statistics,
(d) PS 30 (b): Advanced Field Crops,
(e) AS 30 (b): Advanced Animal Nutrition,
(f) Selected subjects from Technician courses,
(g) Selected subjects from Degree courses for which prerequisites are met,
(h) New subjects for which there is sufficient demand.

B. 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 satisfactoily 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 of 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 given below for the course in which they have registered. The descriptions of subjects will be found on the pages which follow except for those subjects which are prescribed as well as part of the syllabus for a technician course or a degree course. These des-

criptions are found on the pages following the technician or degree syllabi.

C. Syllabus for Biology Laboratory Technology

	FIRST YEAR	First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
100	Sociology	3			
150	Sociology			3	
	or				
151	Sociology			3	
C 20	Chemistry	3	4	3	4
M 20	Physics	2	2	2	2
101	Biology	3	4		
150	Biology			3	4
B 11(a)	Entomology	2	2		

		First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
Either					
B 20(a)	Plant Identification	2	2		
	and				
B 22(b)	Plant Physiology			2	2
Or					
AS 27(a)	Animal Physiology	2	2		
AS 28(b)	Animal Pathology			2	2
	and				
AS 20(a)	Animal Nutrition	3	2		

SECOND YEAR

		First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
B 30	Biological Techniques	2	4	2	4
B 31(a)	Biology Laboratory Practices	2	3		
B 32(b)	Microbiology			2	3
B 33	Technical Projects & Reports		3		3
M 30(a)	Basic Statistics	3			
C 31(a)	Qualitative Analysis	2	4		
C 31(b)	Quantitative Analysis			2	4
AB 31	Office Practices (including Work Simplification)		2		2
B 34(b)	Seminar				1
M 31(b)	Computer Programming	Equivalent of one lecture per week, 2nd term			

D. Syllabus for Chemistry Laboratory Technology

FIRST YEAR

		First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
100	Sociology	3			
150	Sociology			3	
	or				
151	Sociology			3	
C 20	Chemistry	3	4	3	4
M 20	Physics	2	2	2	2
AE 21(b)	Electrical Controls			1	3
100	Mathematics	3			
C 31(a)	Qualitative Analysis	2	4		
C 31(b)	Quantitative Analysis			2	4
C 11	Soils	2	2	2	2

SECOND YEAR

		First Term Lec.	First Term Lab.	Sec. Term Lec.	Sec. Term Lab.
AS 20(a)	Animal Nutrition	3	2		
C 30	Plant Nutrition	2	2	2	2
C 32	Instrumentation	3	4	3	4
C 33(b)	Laboratory Organization & Records			2	4
C 34	Technical Projects, Reports and Seminar		4	1	4
M 30(a)	Basic Statistics	3			
AB 31	Office Practices (including Work Simplification)		2		2
C 35(a)	Glass Blowing		1		
C 31(b)	Seminar				
M 31(b)	Computer Programming			Equivalent of one lecture per week, 2nd term	

E. Syllabus for Ornamental Horticulture Technology

FIRST YEAR

		Semester I Lec	Semester I lab	Semester II Lec	Semester II lab
PS27	Ornamental HOrticulture	2	4	2	4
B20(a)	Plant Identification	2	2		
B22(b)	Plant Physiology			2	2
C11	Soils	2	2	2	2
AE14	Agricultural Engineering		3		3
PS22(a)	Plant Propagation	1	2		
B21(b)	Plant Pathology			2	1

B11(a)	Entomology	2	2		
PS25	Turf Management	2	2	2	2
AE27(b)	Horticulture Machinery			2	2

SUMMER PROGRAM

PS31s	Landscaping techniques
	work)
PS33s	Project (equivalent to one full course for one term)

FINAL YEAR

		Semester III		Semester IV	
		Lec	lab	Lec	lab
AB12(b)	Work Simplification			one week	
AB10	Accounting	2	2	2	2
AE31	Art & Design	3		3	
100	Sociology	3			
151	Sociology			3	
C36(b)	Plant Nutrition			2	
PS32	Landscape Design	3	6	3	6
PS24	Greenhouse Crops Production	1	2	1	2
AE26(a)	Soil & Water Management	2	2		
AE15(a)	Surveying	2	2		

F. 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.

G. Syllabus for Farming Technology

FIRST YEAR

Required

		First Term		Sec. Term	
		Lec	Lab	Lec	lab
AB10	Accounting	2	2	2	2
EC204	Production Economics	2	4		
AS10(a)	Livestock Production (Ruminants)	3	2		
AS12(b)	Livestock Production (Non-ruminants)			3	2
PS20	Field Crop Production	2	2	2	2
AE20	Power and Machinery	2	2	2	2
AB21(a)	Applied Marketing	1	4		
EC254	Farm Management			3	2

Electives

Three recommended each term from list of electives that follows.

SUMMER AND SECOND YEAR

ON-FARM TRAINING: 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. These skills and learning experiences, and the responsibilities of both the student and farm instructor will be clearly established and documented in a training contract with the college. A comprehensive farm planning project is begun during this phase of the training program.

The student returns to the college for the final spring semester.

Required		First Term		Sec. Term	
		Lec.	Lab.	Lec.	Lab.
AB24(b)	Applied Farm Management			1	4
AB32(b)	Farm Project				4

Electives: Four Recommended from the following list.

ELECTIVES

PS11	Plant Science Skills		4		4
AE13	Shopwork	1	4	1	4
PS21	Fruit Production	1	2	1	2
PS26(a)	Vegetable Production	3	2		
AS27(a)	Animal Physiology	2	2		
B11(a)	Entomology	2	2		
AS20(a)	Animal Nutrition	3	2		
AS11(b)	Animal Husbandry Skills				2
PS28(b)	Potato Production			2	2
AS28(b)	Animal Pathology			2	2
AS24(b)	Animal Breeding			3	
B32(b)	Plant Physiology			2	2
B21(b)	Plant Pathology			2	3
AS30(b)	Advanced Animal Nutrition			3	
PS30(b)	Advanced Field Crops			2	1
AE25(b)	Oil Hydraulics			2	2

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 following subjects are arranged for the 1974-1975 academic year. The Faculty reserves the right to make any revisions or additions which may be necessary. Subjects not found in the group which follows may be found among the technician courses or among the degree courses.

AB 30: **Advanced Business Management**
Instructor: **Prof. Tait**

Micro-economics, inventory control, personnel management, and linear programming are examined. Students are required to carry out a quite intensive project designed to give practical management experiences. Business Management games and text cases are used to further students' training in the area of business management.

Both terms – 2 lecs. and 2 labs. per week

AB 31: **Office Practices**
Instructor: **Prof. Sefton**

This course involves the mastery of typewriter and calculator keyboards and the development of speed and accuracy. These skills will then be integrated and applied to realistic production problems.

Final year, both terms – 2 labs. per week

AB32(b) **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 making 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.

Final year second term - 4 labs. per week.

AE28: **Introduction to Horticultural Engineering**
Instructor: **Prof. Townsend**

The basic drafting skills with emphasis on lettering, the use of drawing instruments, pencil and ink drawings, sketching, drafting aids, symbols, contour mapping, ditch profiles and topographic drawings.

Lectures deal with concrete as building material, stress-

ing ingredients, placement and curing for maximum strength; materials used to construct fences, furnishings and walks with emphasis on durability.

Ornamental Hort., 1st year, both terms - 3 labs. per week.

AS 30 (b): **Advanced Animal Nutrition**
Instructor: **Prof. Cock**

Advanced study in the nutrition of farm animals. The course will deal with the utilization of nutrients and will require independent study of current research.

2nd term – 3 lecs. per week

B 30: **Biological Techniques**
Instructor: **Prof Levy**

Preparation of sectioned and other materials for microscopical examination, use of the microtome, staining and slide preparation; cytological and chromosome study.

Both terms – 2 lecs. and 4 labs. per week
Reference Texts: Johansen, PLANT MICROTECHNIQUE
Sass, ELEMENTS OF BOTANICAL TECHNIQUE
Peacock, ELEMENTARY MICROTECHNIQUE

B 31 (a): **Biology Laboratory Practices**
Instructors: **Biology Staff**

The culture and care of plants, insects and small animals, commonly used in laboratory experiments; the collecting, preparation and classification of plant and insect specimens for permanent collections; the care and operation of laboratory equipment.

1st term – 2 lecs. and 3 labs. per week

B32(b): **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, nutri-

tion, 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.

2nd term – 3 lecs. and 3 labs. per week

Text: Brock and Brock, BASIC MICROBIOLOGY WITH APPLICATIONS

B 33: **Technical Projects and Reports**

A major project and report to be carried out in a specific area of biology, under the guidance of a faculty member or professional in the field. A project report is to be submitted.

Both terms – 3 labs. per week

B 34 (b): **Seminar**

The preparation and presentation of technical papers and reports will be discussed. Students will be required to prepare and present a technical paper, usually on the major project accomplished under B 33.

2nd year, 2nd term – 1 lec. per week

C 20: **Organic Chemistry**
Instructor: **Prof. Payne**

The basic principles and theories of Organic Chemistry, the nomenclature of organic compounds, the chemistry of functional groups of various basic classes of organic compounds, the importance of Organic Chemistry in relation to animal and plant life, and introductory Biochemistry, including the study of carbohydrates, lipids, proteins, enzymes, and vitamins are presented.

The modern organic and biochemical methods of extraction, purification and identification are studied, using modern laboratory procedures. Spectrophotometric and microscopic analyses methods are employed. Laboratory procedures are correlated with lecture material and emphasis is placed on agricultural materials.

Both terms – 3 lecs. and 4 labs. per week

Text: Hart and Schuetz, ORGANIC CHEMISTRY (3rd edition)

C 30: **Plant Nutrition**
Instructors: **Profs. MacLean, Levy, Badcock and Langille**

A study of the plant system as it relates to nutrition, involving translocation, transpiration, photosynthesis, essential elements and their role in the health and vigor of plants, symptoms of deficiencies and the diagnostic techniques used in studying the nutrition of plants. Evaluation of plant nutrition in relation to field and greenhouse crop production.

Both terms – 2 lecs. and 2 labs. per week
Text: to be selected
Laboratory: Student selected plant nutrition projects

C31(a): **Qualitative Analysis**
Instructor: **Prof. Hawley**

Using semimicroanalysis 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 product, hydrolysis, common ion effect, electrolytes, electrolysis, redox reactions, complex ions, oxidation potentials, pH, indicators, buffers.

1st term – 3 lecs. and 4 labs. per week
Text: Layde and Busch. INTRODUCTION TO QUALITATIVE ANALYSIS

C31(b): **Quantitative Analysis**
Instructor: **Prof. MacConnell**

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.

2nd term – 3 lecs. and 4 labs. per week
Text: Gilreath, ELEMENTARY QUANTITATIVE CHEMISTRY

C32: **Instrumentation**
Instructor: **Prof. MacLean**

A course in chemical instrumental methods of analysis designed to give practical laboratory experience and adequate theoretical background to understand the principles of methodology and operation techniques. Instrumental methods include colorimetry, turbidimetry, refractometry, polarimetry, ultraviolet, infrared and atomic absorption, flame photometry, spectroscope and spectrograph analysis, gas liquid, paper and thin layer chromatography, electrophoresis, potentiometry, conductivity, electrolysis and polarography.

Both terms – 3 lecs. and 4 labs. per week
Text: James W. Robinson, UNDERGRADUATE INSTRUMENTAL ANALYSIS

C 33 (b): **Laboratory Organization, Records and Reports**
Instructor: **Prof. Langille**

The design, planning, organization and operation of a modern chemical laboratory. The recording and keeping of records, the reporting of analytical results.

2nd term – 2 lecs. per week

Laboratory – practical experience in chemical laboratory projects.

C34: **Technical Projects, Reports and Seminar**
Instructors: **Profs. MacLean and Langille**

The designing, planning and carrying out of chemistry related projects, selected or assigned, the preparation and written presentation on a topic of major interest.

1st term – 4 labs. per week
2nd term – 1 lec. and 4 labs. per week

C 35 (a): **Glass Blowing**
Instructor: **Prof. MacConnell**

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.

C36(b) **Plant Nutrition**
Instructors: **Profs. Langille and MacLean**

A study of the importance and function of major and minor elements in plant growth and the nutrient levels required for optimum production. Deficiency and toxicity symptoms will be examined as well as the diagnostic techniques used to identify these conditions.

2nd term - 2 lecs. per week
Text: to be selected

255: **Communications**
Instructor: **Prof. Burt**

This course involves both basic theories of communications and practical experience in methods. During the course methods involving speaking, writing, radio, television, photography, graphics, exhibits, and meetings will be covered.

2nd term – 3 lecs. per week

M 20: **Physics**
Instructor: **Prof. Buckler**

This course emphasizes the fundamentals of light, electricity and magnetism, basic electronics, heat and atomic and nuclear physics, with only sufficient mechanics as is necessary for an understanding of these topics.

Both terms – 2 lecs. and 2 labs. per week
Text: Harris and Hemmerling, INTRODUCTORY APPLIED PHYSICS

M 30 (a): **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.

1st term – 3 lecs. per week
Text: Alder and Roessler, INTRODUCTION TO PROBABILITY AND STATISTICS

M 31 (b): **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 time-sharing system by running their own programs.

2nd term – equivalent of one lecture per week

PS22(a): **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.

1st term - 1 lec. and 2 labs. per week

PS 30 (b): **Advanced Field Crops**
Instructor: **Prof. Bubar**
Prerequisite: **Plant Science 20**

Production of field crops for industrial and commercial markets. Specialized seed production.

2nd term – 2 lecs. and 1 lab. per week

PS 31 (s): **Landscaping Techniques**

A summer course in which students learn techniques in maintenance of lawns, flower beds, shrubs and hedges; lawn seeding and sodding; moving trees and shrubs, pruning and tree surgery. Students participate in implementing design plans from blueprints.

PS 32: **Landscape Design**

Major topics covered are advanced arboricultural considerations including shade tree evaluation; environmental and noninfectious diseases of trees; landscape illumination; contract documents; estimating and systematic approach to site planning and design of private or public recreational, commercial, and residential facilities.

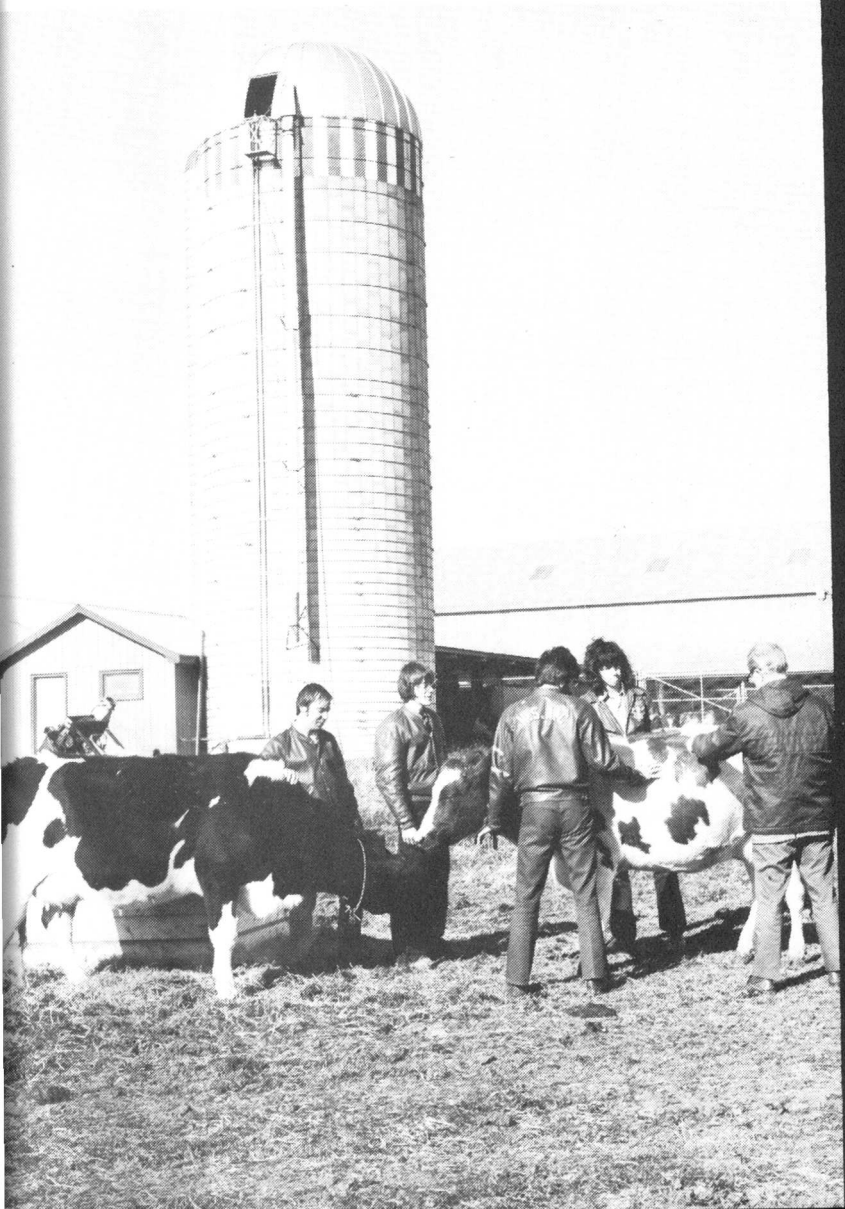
Orn. Hort., 2nd year, both terms – 3 lecs. and 6 labs. per week

PS33: **Art and Design**

The study of graphics including lettering; basic forms; perspective methods; shades and shadows; as well as emphasis on elements and principles of design as each relates to Ornamental Horticulture.

Orn. Hort., 2nd year, both terms – 3 lecs. 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 1974-75 year. Similar, but not necessarily the same, courses will be planned for the 1975-76 year.

Artificial Insemination
Horsemastership
Meat Cutting
Basic Farrier Training
Christmas Tree Grading
Basic Christmas Tree Production
Operation and Repair of Farm Machinery
CanFarm Records System
Maple Sap Production
Turf Machinery Maintenance
Basic Turf Production
Advanced Farrier Training
Land Use Planning
Tree Fruit Production
Greenhouse Crop Production
Ornamental Horticulture
Poultry Meat Production
Farm Accounting
Mink Production
Swine Herd Management
Advanced Turf Production
Weed Control
Basic Sheep Production
Power Saw Operation and Safety
Floral Design
Advanced Sheep Production
Basic Iron Work
Beef Production
Farm Welding
Woodlot Harvesting
Operation and Repair of Farm Tractors
Advanced Swine Husbandry

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 $29.00 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 that 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 Registrar, Nova Scotia Agricultural College, Truro, Nova Scotia.

Location of Canada Manpower Centres in the Atlantic Region:

Prince Edward Island

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

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. 5 B 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 699, 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 AND PRIZES

SCHOLARSHIPS

ENTRANCE SCHOLARSHIPS (DEGREE COURSE)

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 Agricultural College for the first time. In making the award, 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, NEW BRUNSWICK, AND PRINCE EDWARD ISLAND

The Provinces of Nova Scotia, New Brunswick and Prince Edward Island offer scholarships to their residents entering the Degree Course at the Nova Scotia Agricultural College with high 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.

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 clost May 1st.

ENTRANCE SCHOLARSHIPS (DEGREE OR TECHNICIAN COURSE)

NOVA SCOTIA AGRICULTURAL COLLEGE ALUMNI SCHOLARSHIP

The Nova Scotia Agricultural College Alumni Association offers a scholarship of $300. to a worthy student entering the first year of the Degree or Technician Course. Academic standing and financial need will be taken into consideration in awarding the scholarship. 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 the 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 four bursaries of $100. 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 a daughter of a Federation member and who is enrolled in 1974-75 in the Technician Course at this institution. The scholarship will be payable in two parts: $50. on completion of the first year 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, NEW BRUNSWICK, AND PRINCE EDWARD ISLAND

The Provinces of Nova Scotia, New Brunswick and Prince Edward Island offer scholarships to their residents registered in the second or third 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.

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.

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 residents of Maine. The tuition is a variable figure, but the arrangement represents a saving of approximately $1,000 per year.

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 an Animal Husbandry, 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 $100. 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 Husbandry 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 1973-74

FIRST YEAR DEGREE

Dwight Balzer, Petitcodiac, N.B.
Stephen Baxter, 162 Burnyeat Street, Truro, N.S.
Everett Beck, R.R. 5, Debec, N.B.
Deborah Benedict, Box 333, Mahone Bay, N.S.
Henry Braam, R.R. 2, Salisbury, N.B.
Joe Calder, 61 MacFarlane St., Springhill, N.S.
Vernon Campbell, R.R. 6, Kensington, P.E.I.
Elaine Clark, R.R. 1, North Wiltshire, P.E.I.
Deborah Clive, Port Maitland, N.S.
Paul Coady, 7 Fairview Drive, Truro, N.S.
Linda Coates 2026 Rothesay Rd., Renforth, N.B.
Brian Cochrane, 27 Frink St., Saint John, N.B.
Robert Cogswell, Port Williams, N.S.
Laurie Cole, R.R. 6, Kingston, N.S.
Gilles Corno, R.R. 1, Edmunston, N.B.
Peggy Cosman, 40 Birch Crescent, Saint John, N.B.
Janet Countway, Chester Basin, N.S.
Colin Crabbe, Perth-Andover, N.B.
Roy Creighton, Box 87, Floral Hill, Sussex, N.B.
Beverley Crowell, 9 Blackett St., Glace Bay, N.S.
Mona D'Entremont, 140 Church St., Moncton, N.B.
Paul Dunphy, Site 73, Box 6, Torbay Rd., St. John's, Nfld.
David Dykeman, Jemseg, N.B.
Ann Fillmore, R.R. 1, Box 100, Bathurst, N.B.
Mary Floris, R.R. 1, Paradise, N.S.
Colleen Fraser, 78 MacKay St., New Glasgow, N.S.
Bernadette Frigault, Maitland, N.S.
Catherine Gallivan, R.R. 1, Lakeville, N.B.
Russell Gammon, R.R. 2, Pictou, N.S.
Paul Geddes, 8 Parker St., Truro, N.S.
Stephen Goodyear, 2B Memorial Drive, Gander, Nfld.
Otto Goulding, Exmouth St., St. John's, Nfld.
Anne Gray, Box 45, R.R. 2, Redbank, N.B.
Hollyjean Hellings, 804 Yale Ave., Riverview, N.B.
Debra Holmes, 66 Church St., Antigonish, N.S.

Philip Holmes, Box 485, St. Stephen, N.B.
Steven Horne, R.R. 1, Winsloe, P.E. I.
Becky Hughes, Box 734, Greenwood, N.S.
Susan Hutchison, 9 Wenlock Grove, Halifax, N.S.
Elizabeth Irving, P.O. Box 65, Shubenacadie, N.S.
Kenneth Jeffers, 168 Young St., Truro, N.S.
Maureen Kelly, 1731 King's Road, Sydney, N.S.
Edward Kendall, 6 Bonaventure Ave., St. John's, Nfld.
Mary Kenny, P.O. Box 532, Sydney, N.S.
Mary Lynn Lavers, P.O. Box 243, Kensington, P.E.I.
Wendall Lemmon, R.R. 1, Upper Musquodoboit, N.S.
James Marr, Anagance, R.R.2, N.B.
Deborah Marsh, 60 Roach's Road, New Waterford, N.S.
Melodie Martin, 818 Main St., Woodstock, N.B.
Wilma Menzies, 164 York St., Sydney, N.S.
Margaret Morrison, Milford Station, N.S.
Gregory Muise, Quinan, Yarmouth Co., N.S.
Beverley Anne MacDonald, Peakes, Mt. Stewart, R.R. 5, P.E.I.
Daniel MacDonald, 128 Audrey Rd., Riverview, N.B.
Elizabeth MacDonald, R.R. 1, Crapaud, P.E.I.
Susan MacDonald, R.R. 2, Marion Bridge, N.S.
Barbara McLaughlin, R.R. 2, Andover, N.B.
Bernard MacLennan, 48 James St., Truro, N.S.
Cynthia MacLeod, R.R. 3, Howie Centre, Sydney, N.S.
David MacNeil, Main St., Florence, N.S.
Beverley MacPhail, R.R. 2, Marion Bridge, N.S.
James Neary, 63 Roosevelt Ave., Truro, N.S.
Hugh Nelson, Hopewell Cape, N.B.
Fraser Nicholson, 194 South Street, Glace Bay, N.S.
Thomas O'Neill, 1995 Prince Arthur St., Halifax, N.S.
Jacklyn Parker, R.R. 3, Newport, Hants Co., N.S.
Shari Parkhill, Clifton Royal, R.R. 1, N.B.
Andrew Partridge, P.O. Box 217, Dorchester, N.B
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Martin Porskamp, R.R. 5, Canning, N.S.
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Gerald Roberts, Kinkora, P.E.I.
Phillip Robichaud, Box 269, Arichat, N.S.
Claredon Robicheau, Box 31, Meteghan, N.S.

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Robert Rock, 44 Summit St., Dartmouth, N.S.
Glenn Ross, 48 Salter Ave., Truro, N.S.
Patricia Ross, 23 Shore Road, Sydney Mines, N.S.
Barry Russell, R.R. 1, Hillsborough, N.B.
Steven Russell, R.R. 6, Amherst, N.S.
Ingrid Schaad, R.R. 1, Tatamagouche, N.S.
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Sheena Smith, 71 Richardson Ave., Sydney, N.S.
Stephen Swan, 45 Fulton Ave., Toronto, Ont.
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Peter Swinkels, R.R. 1, Afton, N.S.
Stephen Tweedie, Kouchibouquac, N.B.
Harry van der Linden, Box 58, Heatherton, N.S.
Theodore van Lunen, Box 25, Swanton Drive, Dartmouth, N.S.
Michael Vermeer, R.R. 2, Antigonish, N.S.
Andrew Vermeulen, Milford Station, N.S.
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Martin Walker, 3 Hillside Ave., Dartmouth, N.S.
Robert Wentzell, Ellenvale Ave., Dartmouth, N.S.
Stanley Wentzell, R.R. 1, Brooklyn, N.S.
Robert Wilson, R.R. 1, Stanley, N.B.
Phyllis Woodside, R.R. 6, Kensington, P.E.I.
Heather Wyatt, R.R. 1, Windsor Junction, N.S.

SECOND YEAR DEGREE

Philip Bailey, R.R. 3, Newport, N.S.
Bruce Barnaby, 15 Penticost Drive, Sydney, N.S.
Marc Belliveau, 674 Mountain Rd., Moncton, N.B.
Randall Bishop, R.R. 2, Wolfville, N.S.
James Blackie, Florenceville, N.B.
Gayle Bothen, Box 6, Salisbury Cove, Maine
Robert Bradley, R.R. 3, Port Elgin, N.B.
James Brannen, 109 Slayter St., Dartmouth, N.S.
John Brown, R.R. 3, Sussex, N.B.
Clifford Carter, R.R. 4, Norton, N.B.
David Clark, R.R. 2, North Sydney, N.S.
Russell Clark, Long Creek, P.E.I.
Janet Cochrane, Ste. Croix, N.S.
Laurie Cochrane, R.R. 1, Walton, N.S.
Carol Coldwell, Box 152, Port Williams, N.S.
Linda Coleman, 15 Spruce Terrace, Fredericton, N.B.

Brain Crouse, R.R. 6, Bridgewater, N.S.
Daniel Dalton, R.R. 1, Elmsdale, P.E'I.
Ronald DeHaan, R.R. 3, Truro, N.S.
Alan Donkin, R.R. 3, Truro, N.S.
Arthur Donovan, 116 Poole St., Woodstock, N.B.
Douglas Doohan, R.R. 2, Fredericton, N.B.
Duncan Fairbairn, 103 Legion Dr., Fredericton, N.B.
Tanya Fitch, R.R. 1, Kingston, N.S.
Keith Fulton, R.R. 3, Stewiacke, N.S.
Gerald Gallant, R.R. 1, Douglastown, N.B.
Clair Gartley, R.R. 7, Woodstock, N.B.
Sheila Gourley, Box 85, Stewiacke, N.S.
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Alan Hamilton, 71 Dominion St., Truro, N.S.
Benjamin Hawkins, Kennetcook, N.S.
Susan Hoegg, 13 Eastmoor Dr., Truro, N.S.
Ruthann Holland, 329 Ryan Rd., R.R. 8, Moncton, N.B.
Jim Houghton, R.R. 3, Centreville, N.S.
Derrick Jamieson, R.R. 2, Falmouth, N.S.
Adian Johnson, Northern Bay, Nfld.
Anke Jungesblut, Harvey, N.B.
Peter Kennedy, 85 Westmount Rd., Sydney, N.S.
Paul Larrabee, R.R. 3, Belle River, Pinette, P.E.I.
Sharon Latimer, R.R. 1, Tatamagouche, N.S.
Kelvin Lynch, 117 Vimy Rd., Truro, N.S.
Colleen MacCarthy, Auburn, N.S.
Wendy-Jon McKaigue, Box 784, Greenwood, N.S.
John McLean, R.R. 1, Westville, N.S.
Brian MacLellan, 23 High St., Bedford. N.S.
Roderick MacLennan, 85 Churchill St., Truro, N.S.
Helen MacLeod, Box 42, R.R. 1, Bras d'Or, N.S.
Richard MacNeil, 29 Dickie St., Trenton, N.S.
Lloyd Mapplebeck, R.R. 3, Aylesford, N.S.
Dwane Mellish, New Perth, P.E.I.
Richard Melvin, R.R. 2, Canning, N.S.
Ian Moore, 223 Commerce Ave., Summerside, P.E.I.
Michael Murray, R.R. 1, Portugal Cove, Nfld.
John Nicholson, Crapaud, P.E.I.
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Carol Palmeter, Grand Pre, N.S.
Philip Parlee, R.R. 2, Apohaqui, N.B.
Sherry Porter, R.R. 1, Belmont, N.S.
William Rawlinson, R.R. 3, Truro, N.S.
Keiver Read, 39 Lawnwood Drive, Truro, N.S.
Susan Reesor, 12 Woodlawn Ave, Dartmouth, N.S.
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Vernon Taylor, Box 620, R.R. 1, Bathurst, N.B.
Francis Tenhave, R.R. 1, Debec, N.B.

Toni-Lynn Thompson, Grandview Ave., Saint John, N.B.
Mary Toogood, R.R. 2, Brierly Brook, N.S.
Wayne Wood, R.R. 5, Charlottetown, P.E.I.
Jane Yeomans, 917 Wedgewood Avenue, Riverview, N.B.

FIRST YEAR TECHNICIAN

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Mary Bernard, 21 Martin St., Moncton, N.B.
Kristopher Bourne, R.R. 1, Truro, N.S.
Leo Breau, 95 Cornhill St., Moncton, N.B.
Diane Brodie, 15 Beechwood Cresc., Fredericton, N.B.
Brian Casey, Upper Rawdon, N.S.
Philip Chiu, 602-1550 Duchess Ave., West Vancouver, B.C.
John Corcoran, Jr., R.R. 3, Bath, N.B.
Matthew Cooke, 2 George St., Trenton, N.S.
Donald Cox, R.R. 1, Truro, N.S.
Ross Cox, R.R. 1, Maitland, N.S.
Bradford Crewe, 35A Mountain Ave., Dartmouth, N.S.
Peter Dawson, P.O. Box 195, Bay Roberts, Nfld.
Beverley Ann DeWitte, 207 W. Penora, Urbana, Illinois
John Dillman, Milford Station, N.S.
Frederika Dunnewold, R.R. 2, Scotsburn, N.S.
Peter Eisener, 700 Portland St., Dartmouth, N.S.
Neil Erb, Box 7, Parrsboro, N.S.
Oscar Fanjoy, R.R. 4, Sussex, N.B.
Barrett Foster, Cambridge Station, N.S.
Gerald Fraser, R.R. 5, Tatamagouche, N.S.
Ian Harborne, 15 Hillcrest St., Sackville, N.B.
Karen Hardy, Alberton, P.E.I.
Caye Harris, Box 99, Bear River, N.S.
Brenda Heron, R.R. 5, Charlottetown, P.E.I.
Darrell Houghton, R.R. 3, Centreville, N.S.
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Charles Jacob, R.R. 1, Bloomfield, N.B.
Arden Little, Wentworth, N.S.
Clinton Lounsbury, R.R. 2, Petitcodiac, N.B.
Eric Main, R.R. 5, Truro, N.S.
Allison Maynard, R.R. 1, Tyne Valley, P.E.I.
Shirley Melvin, 46 Canary Crescent, Halifax, N.S.
Gary Meyer, R.R. 3, Centreville, N.S.
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Glenn Mosher, R.R. 2, Newport, N.S.
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Walter Myrden, 32 West Valley Rd., Corner Brook, Nfld.

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Damon McCarthy, R.R. 1, Grand Falls, N.B.
Frank McCloskey, Hampshire, P.E.I.
Brian McCollum, R.R. 1, Sussex, N.B.
Ian MacDonald, 2050 Robie St., Halifax, N.S.
James MacDonald, 11 Belmont Ave., Stellarton, N.S.
Russell MacInnis, Marion Bridge, N.S.
Larry McKenna, Apohaqui, N.B.
Robert MacKenzie, R.R. 2, Scotsburn, N.S.
James McLaughlin, Box 650, Grand Falls, Nfld.
William MacLean, R.R. 1, Miscouche, P.E.I.
Michael MacLenna, R.R. 1, Inverness, N.S.
George MacLeod, R.R. 6, St. Stephen, N.B.
Stephen MacLeod, R.R. 3, Truro, N.S.
John MacPherson, Box 7, 51 MicMac Ave., Truro, N.S.
Roderick MacPherson, 151 Bristol Ave., Liverpool, N.S.
Carvell McNutt, 134 Vimy Road, Bible Hill, N.S.
Roderick Nelson, R.R. 5, Truro, N.S.
James Oickle, R.R. 1, Waverley, N.S.
Kenzie Patterson, R.R. 1, Bras d'Or, N.S.
Norman Phinney, Reserve Mines, N.S.
Janet Power, R.R. 5, Charlottetown, P.E.I.
Donald Rafuse, Waterville, N.S.
Paul Rafuse, Waterville, N.S.
Irwin Reeleder, R.R. 2, Florenceville, N.B.
Ruth Ricker, R.R. 3, Moncton, N.B.
Thomas Riordan, R.R. 1, Bathurst, N.B.
Donald Robbins, R.R. 2, Vernon, P.E.I.
Michael Roberts, R.R. 1, Kinkora, P.E.I.
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Stephen Sharpe, R.R. 1, Brookfield, N.S.
Bruce Simmons, 164 East Valley Rd., Corner Brook, Nfld.
Richard Stairs, R.R. 2, Woodstock, N.B.
Ian Steeves, 108 Bridge Street, Sackville, N.B.
Carl Stephenson, Florenceville, N.B.
Stephen Stewart, 26 Spring St., Amherst, N.S.
Brain Thornton, R.R. 1, Woodstock, N.B.
Christopher Trider, 19 Cleveland Crescent, Dartmouth, N.S.
Mary van den Broek, Cardigan, P.E.I.
Bernard Van Gaal, R.R. 1, Aroostock, N.B.
John van Kessel, R.R. 1, New Glasgow, N.S.
Henry Van Vonderen, R.R. 1, Afton, N.S.
Jacob Verhulp, R.R. 7, West Royalty, P.E.I.
Brian Webster, Cambridge Station, N.S.
Gregory Whalen, Box 177, River John, N.S.
Ronald White, Tusket, N.S.
Joanne Wilting, R.R. 2, Cornwall, P.E.I.

SECOND YEAR TECHNICIAN

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Greg Barron, 6535 MacDougall Ave., Halifax, N.S.
Peter Bezanson, 38 Mt. Pleasant Ave., Dartmouth, N.S.
Peter Brown, R.R. 3, Aylesford, N.S.
Douglas Cameron, Albany, P.E.I.
James Conway, Summerville, N.S.
John Allen Crawford, R.R. 5, Centreville, N.B.
Dennis Dickinson, 2535 Poplar St., Halifax, N.S.
Marg Dort, 118 Johnstone Ave., Dartmouth, N.S.
Peter Elderkin, R.R. 3, Wolfville, N.S.
Hugh Faulkner, 1 Woodcrest Ave., Spryfield, N.S.
Patrick Finnigan, R.R. 2, Rogerville, N.B.
Michael Foster, Cambridge Station, N.S.
Philip Franey, R.R. 3, Aylesford, N.S.
Ike Gallagher, Box 128, Centreville, N.B.
Kevin Grant, Milford Station, N.S.
David Gunn, R.R. 3, Scotsburn, N.S.
Donald Harding, 262 Winnipeg Crescent, Chatham, N.B.
Lloyd Hardy, R.R. 2, Ellerslie, P.E.I.
Edward Hartigan, 15 Sunset Court, Truro, N.S.
Gary Henderson, R.R. 2, Scotsburn, N.S.
James Hirtle, R.R. 1, Hopewell, N.S.
John Hutchings, 88 Colonial St., Stephenville, Nfld.
Jack Keirstead, 301 Robie St., Truro, N.S.
Ardith Kennedy, R.R. 2, Upper Stewiacke, N.S.
Lloyd Kerry, 2 Richmond St., Charlottetown, P.E.I.
Alden Knight, 444 Prince St., Truro, N.S.
Shawn Lacey, Milford Station, N.S.
Terry Lister, Harvey Station, N.B.
David Lynch, R.R. 1, Portage, P.E.I.
Blaine MacBride, R.R. 2, Canning, N.S.
Roger McCamon, Coldbrook Station, N.S.
Susan McCrossin, 126 Douglas Ave., Saint John, N.B.
David McCullum, R.R. 1, Sussex, N.B.
Joseph MacLellan, 152 Mitchell Ave., Dominion, N.S.
Norman MacNeil, 2 Horton's Lane, Sydney, N.S.
Robert Parkinson, Woodstock, R.R. 3, N.B.
Melanie Parsons, Glovertown South, Bonavista Bay, Nfld.
John Phillips, R.R. 2, Fredericton, N.B.
Mike Pulsifer, Box 219, Wolfville, N.S.
Georgina Queller, 5425 Glebe St., Halifax, N.S.
Kenneth Reicker, Sussex Corner, N.B.
Roger Richard, R.R. 4, Acadieville, N.B.
Kathryn Rogers, R.R. 2, Stewiacke, N.S.
Michael Scothorn, Milford Station, N.S.
Thomas Shreenan, R.R. 2, Westville, N.S.

David Squarebriggs, 145 Court St., Sussex, N. B.
Blair Stirling, R.R. 2, Wolfville, N.S.
Philip Sweeney, R.R. 3, Yarmouth, N.S.
Janet Tapper, 1 Edinburgh Drive, Mount Pearl, Nfld.
Tony Van den Ende, 119 McAdam Ave., Nashwaaksis, N.B.
Joe Van Vulpen, Nappan, N.S.
Johannes Versteeg, R.R. 1, Milford Station, N.S.
John Vissers, R.R. 5, Bridgewater, N.S.
Martin Vissers, R.R. 1, Milford, N.S.
Christopher Webster, Cambridge Station, N.S.
Peter Wile, R.R. 5, Bridgewater, N.S.

FIRST YEAR TECHNOLOGY

Shelagh Barnes, 370 Hawthorne St., Windsor, N.S.
Nancy Boutilier, R.R. 3, Armdale, N.S.
Ann Bubar, R.R. 5, Hartland, N.B.
Dan Doncaster, Box 1043, Sackville, N.B.
Carol Goodwin, 11 Maple Place, Kentville, N.S.
David Hoegg, 13 Eastmoor Drive, Truro, N.S.
Darrell Kelly, 1731 King's Road., Sydney, N.S.
Stephen King, Little River Rd., Oxford, N.S.
Vernon Mingo, R.R. 3, Truro, N.S.
William Munn, 44 Hillcrest Drive, Sydney, N.S.
Dawn McLaughlin, R.R. 1, Aroostook, N.B.
Andrea Pinhey, Box 332, Milton, N.S.
Rosalind Pound, R.R. 1, Torbay, Nfld.
Catherine Pray, 284 Winnipeg Cresent, Chatham, N.B.
Nancy Smeltzer, 148 Belcher St., Kentville, N.S.
Deborah Smith, 350 High St., Summerside, P.E.I.
Dolly Stewart, Kouchibouquac, N.B.
Donna Thompson, R.R. 3, Charlottetown, P.E.I.
Vickie Weldin, 25 Raymond Drive, Lower Sackville, N.S.

FINAL YEAR TECHNOLOGY

Patricia Berube, R.R. 1, Barney's River Station, N.S.
Carmella Bordage, R.R. 4, Acadieville, N.B.
Karen Denton, R.R. 3, Truro, N.S.
Marion Drake, R.R. 1, Charlottetown, P.E.I.
James Ellsworth, 132 Beacon St., Glace Bay, N.S.
Philip Helliwell, 4 John Cross Drive, Dartmouth, N.S.
Janice Hicks, R.R. 6, Moncton, N.B.
Pamela Hyson, Box 359, Hantsport, N.S.
Raymond Inness, 179 Bunbury Rd., Charlottetown, P.E.I.
Michael Kelly, 1731 King's Road, Sydney River, N.S.
Clara LeBlanc, R.R. 1, Kouchibouquac, N.B.
Wendy LeRue, Greenwood Heights, Timberlea, N.S.
Susan Melanovich, 17 Smith Ave., Dartmouth, N.S.

Alfreda Melanson, R.R. 1, Haute-Aboujagane, N.B.
Murray Mitchell, R.R. 2, Armdale, N.S.
Donald MacDonald, P.O. Box 113, Antigonish, N.S.
Joan MacDonald, Melvern Square, N.S.
Charlotte MacNeil, 5 MacDonald St., Glace Bay, N.S.
Lynn McGrath, 5258 Kent St., Apt. 17, Halifax, N.S.
Linda Spafford, 68 Lorne Ave., Dartmouth, N.S.
Barbara Stoddard, R.R. 2, Falmouth, N.S.
Marlene Wheatley, R.R. 4, Cornwall, P.E.I.

SPECIAL STUDIES

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Bill Bissett, Bissett Rd., Dartmouth, R.R. 1, N.S.
Michael Bradley, 187 Dorchester St., Charlottetown, P.E.I.
Peter Bulger, Portage, P.E.I.
Barbara Dickinson, R.R. 5, Woodstock, N.B.
Dennis Hyslop, R.R. 2, Moore's Mills, N.B.
Charles Killen, R.R. 3, Middle Musquodoboit, N.S.
Harvey Mitchell, Cornwall, P.E.I.
Brian MacIntosh, Glassville, N.B.
Bill Oulton, R.R. 2, Windsor, N.S.
James Rodd, R.R. 2, North Milton, Winsloe, P.E.I.
Joseph Shelby, Great Villege, N.S.
Arie Schop, R.R. 3, Aylesford, N.S.
David Tait, 28 Pleasant St., Shediac, N.B.
Angela Tims, 97 Forest Hill, Fredericton, N.B.
Ivan Trafford, Florenceville, N.B.
Brian Trueman, R.R. 4, Amherst, N.S.
Ralph Yeo, 201 East Drive., St. Eleanor's, P.E.I.

FARM TECHNOLOGY STUDIES

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Alan Dixon, 120 Birchmount Drive, Moncton, N.B.