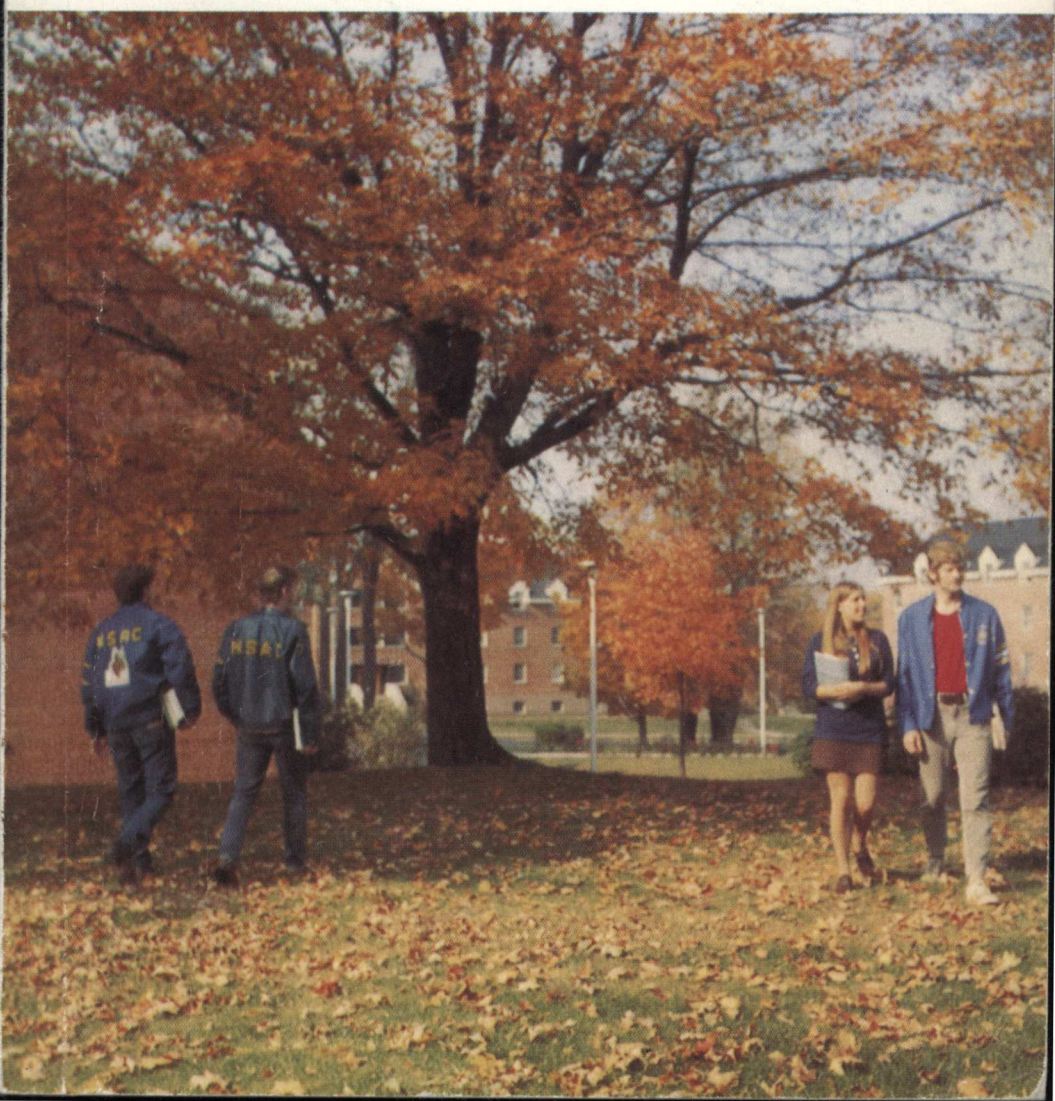


A. D. Ellis



NOVA SCOTIA AGRICULTURAL COLLEGE

CALENDAR
1973-1974



SIXTY EIGHTH ANNUAL

CALENDAR

OF THE

NOVA SCOTIA

AGRICULTURAL COLLEGE

TRURO

UNDER

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

1973 — 1974

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APPLICATION FOR ADMISSION (1973)

NOVA SCOTIA AGRICULTURAL COLLEGE

Date.....

Name in full.....

Address.....

Birthday.....
Day Month Year

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

Address.....

If you were not in high school during the 1971-72 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 21)

Please complete the reverse side

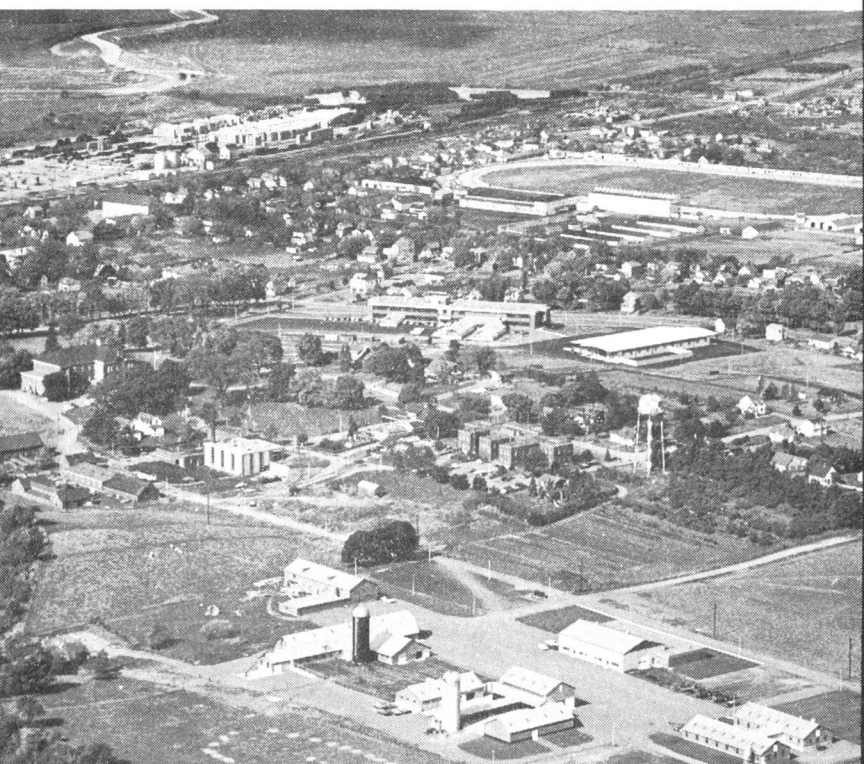
Questions to be answered and form returned to:
THE REGISTRAR
THE NOVA SCOTIA AGRICULTURAL COLLEGE
TRURO

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



OFFICERS OF ADMINISTRATION

Principal

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

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

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), B. D.
(Pine Hill)

Assistant Deans of Residence

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

B. M. MAHONEY

Placement Officer

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

Business Manager

R. F. McEWAN

Secretary

MRS. A. MARIE HARTIGAN

Principal Emeritus

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

Professor Emeritus

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

1973

JULY							1973						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
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8	9	10	11	12	13	14							
15	16	17	18	19	20	21							
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29	30	31	-	-	-	-							
-	-	-	-	-	-	-							

AUGUST							1973						
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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							1973						
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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							1973						
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21	22	23	24	25	26	27							
28	29	30	31	-	-	-							
-	-	-	-	-	-	-							

NOVEMBER							1973						
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18	19	20	21	22	23	24							
25	26	27	28	29	30	-							
-	-	-	-	-	-	-							

DECEMBER							1973						
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23	24	25	26	27	28	29							
30	31	-	-	-	-	-							

1974

JANUARY							1974						
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27	28	29	30	31	-	-							
-	-	-	-	-	-	-							

FEBRUARY							1974						
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17	18	19	20	21	22	23							
24	25	26	27	28	-	-							
-	-	-	-	-	-	-							

MARCH							1974						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
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17	18	19	20	21	22	23							
24	25	26	27	28	29	30							
31	-	-	-	-	-	-							

APRIL							1974						
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14	15	16	17	18	19	20							
21	22	23	24	25	26	27							
28	29	30	-	-	-	-							
-	-	-	-	-	-	-							

MAY							1974						
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12	13	14	15	16	17	18							
19	20	21	22	23	24	25							
26	27	28	29	30	31	-							
-	-	-	-	-	-	-							

JUNE							1974						
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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 — 1973 - 74

1973

August 27	Refresher Course for selected First Year Technician students commences at 1:30 p. m.
September 5-7	Supplemental examinations.
September 10	Registration for students registering for the first time
September 11	Registration for returning students
September 12	Lectures commence at 8:15 a.m.
October 8	Thanksgiving Day. No classes
November 9-11	Mid-term break
December 11-21	First term examinations

1974

January 7	Second term lectures commence at 8:15 a.m.
One week	Mid term break for individual study. Dates to be arranged.
April 12	Good Friday. No classes
April 15-25	Second term examinations
May 1	Graduation exercises

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

- for Refresher Course students, the morning of August 27,
- for students who have to write supplemental examinations, after dinner on September 4;
- for all new students, after dinner on September 9,
- for all other students, after dinner on September 10.

Any student who wishes to use the facilities of a dormitory before the times set down above will be charged at the rate of \$5.00 per day.

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 6, a penalty of \$5.00 will be imposed for each day of lectures until registration has been completed.

FACULTY COUNCIL

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

R. C. GILKIE, B. Sc. (Dalhousie), B. Eng. (Nova Scotia
Technical College), Ph. D. (London)

Visiting Lecturer

Animal Science

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

Professor

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

Principal and Professor

S. L. CURTIS, B. S. A. (Toronto), M. Sc. (Massachu-
setts), Ph. D. (Minnesota)

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)

Associate Professor

G. V. M. MOWBRAY, D. V. M. (Toronto)

Visiting Lecturer

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

Lecturer (on loan)

Biology

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

Professor

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

Assistant 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

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

Assistant Professor

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

Lecturer

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)

Lecturer

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. Sc. (Agr.) (McGill), M. Sc. (Connecticut)

Lecturer (on loan)

R. L. ROSE, B. Sc. (Agr.) (McGill)

Lecturer (on loan)

English and Social Sciences

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

Associate Professor

REV. D. I. MacEACHERN, B. A. (Mt. Allison), B. D. (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

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

Physical Education

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

Lecturer

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)

Lecturer

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

Assistant Professor

Lecturers on loan are members of the staff of the Nova Scotia Department of Agriculture and Marketing.

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, 1973, and February 15, 1974. This also applies to students who have applied for Canada Student Loans and have not had them finalized.



DEGREE COURSES

Payments due September 10, 1973.

Tuition	\$225
Board and lodging	\$340
Caution and laboratory deposit	\$ 20
Students' Council	\$ 40
Medical fee	<u>\$ 6</u>
	\$631

Payments due January 7, 1974

Tuition	\$225
Board and lodging	<u>\$380</u>
	\$605

Books (estimated), September 10, 1973 \$ 75

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 10, 1973

Board and lodging	\$340
Caution and laboratory deposit	\$ 20
Students' Council	\$ 40
Medical fee	<u>\$ 6</u>
	\$406

Payments due January 7, 1974

Board and lodging	\$380
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Books (estimated), September 10, 1973 \$ 65

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, with the

exception noted below, will look after the costs of a doctor's service which are not provided for by a provincial medical insurance plan or a private plan and of non-prescription drugs for the infirmary. It will not provide for prescription drugs, hospitalization or operations. All doctor's services will be requested by the College nurse or, in an emergency in which she cannot be available, reported to her immediately after the service has been provided.

If a student withdraws during the term, except for health or other compelling compassionate reasons, he will receive no refund of the tuition fee, and, if a resident of one of the dormitories, no refund of room rent. Any balance of board payment over and above the initial deposit of \$25.00 will be refunded.

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.

REGISTRATION DEPOSIT

All unmarried students except those living at home will be required to live in one of the College dormitories unless special permission to live out has been granted through the Registrar's office.

Students for whom a room has been reserved in a dormitory are required to pay a deposit of \$25.00, returning students before June 30 and new students as soon as they are asked for it.

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 within two months after the closing of the college year.

CANADA STUDENT LOANS PLAN

The government of Canada makes available to students enrolled in the Degree and Technician Courses loans of up to \$1400, 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 College operates under authority of an act of the legislature of Nova Scotia.

Over the years instruction has been offered at various levels: among them credits towards a degree in Agriculture, semi-vocational courses, technician courses, and vocational short courses. In 1973-74 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 sixty-eight 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.

A number of graduates of the Nova Scotia Agricultural College have continued their studies at the Ontario Veterinary College (now a college of the University of Guelph). Qualified

graduates from the Degree Course are considered for admission to the first year in veterinary medicine.

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.

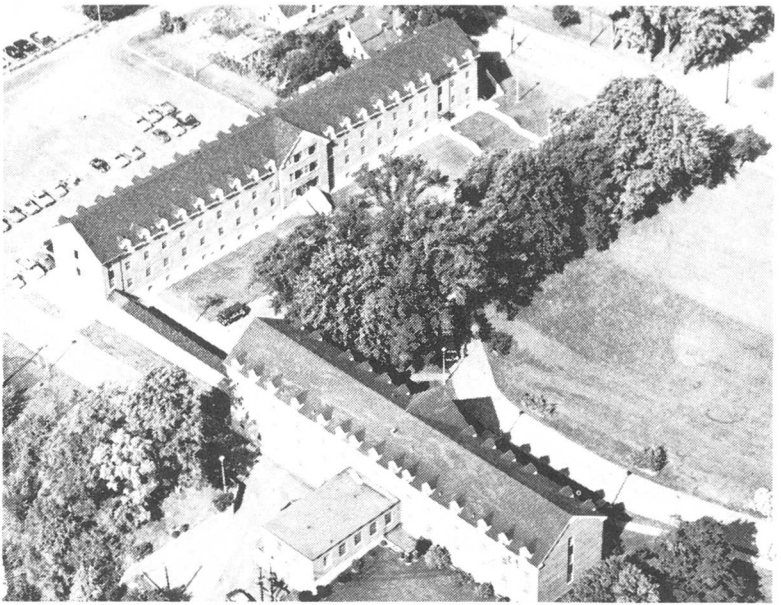
The University of Maine will consider for admission to its second last year in Agricultural Science a limited number of graduates of the Nova Scotia Agricultural College who have been recommended by the Principal.

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 sixty-eight years the College has been in existence, is conclusive evidence that Maritime 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 and a new barn 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 accommoda-



tions for approximately 400 male students, and Trueman House provides accommodation for 80 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.

The various courses arranged for the 1973-74 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 to be 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

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

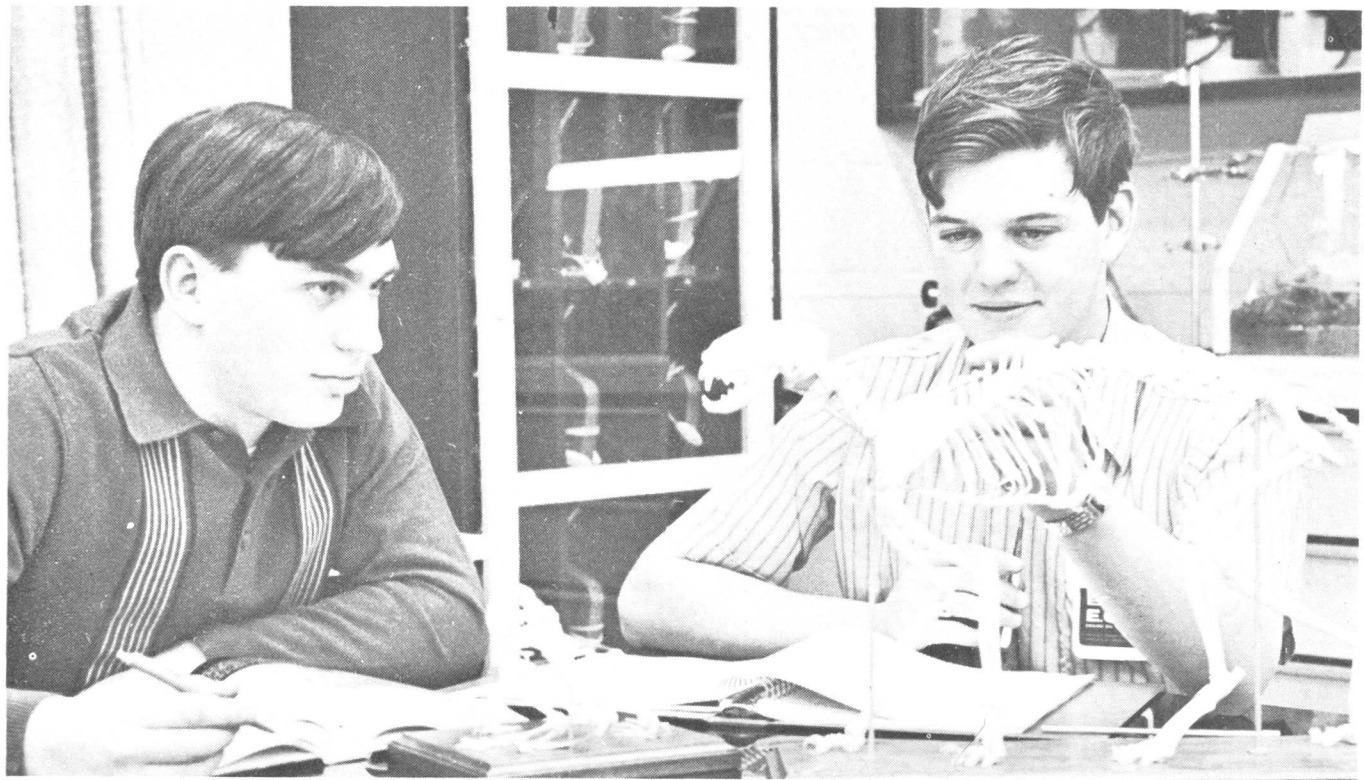
Salvation Army

Calvary Pentecostal Church

Wesleyan Methodist Church

Church of the Immaculate Conception





STUDENT PLACEMENT SERVICE

The Placement Office provides vocational counselling and employment services to all students.

This office is staffed by one person on a full time basis as well as a Canada Manpower Representative who serves in a part time capacity.

In order to take advantage of the services offered, students seeking part time, summer or regular employment should register during the early fall.

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.

Details of dress regulations will be given in the Student Handbook.

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.

DEBATING SOCIETY

The Students' Debating Society conducts a series of inter-class debates. The champions are awarded the Nova Scotia Department of Agriculture and Marketing debating trophy.

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) Interscholastic athletics. The college is represented in the Nova Scotia Colleges Conference, a seven team athletic conference which directs interschool competition in soccer, basketball, and hockey. The college also competes on an interschool basis in the Woodsmen's Competition.

(c) Physical education. This is a program of "education through the physical".

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

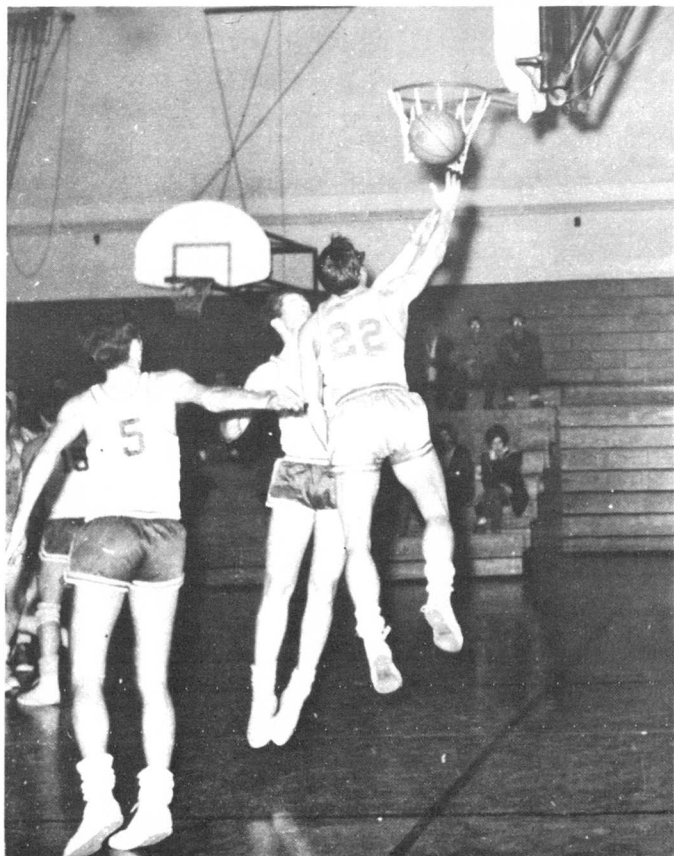
student are ineligible to play.

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.

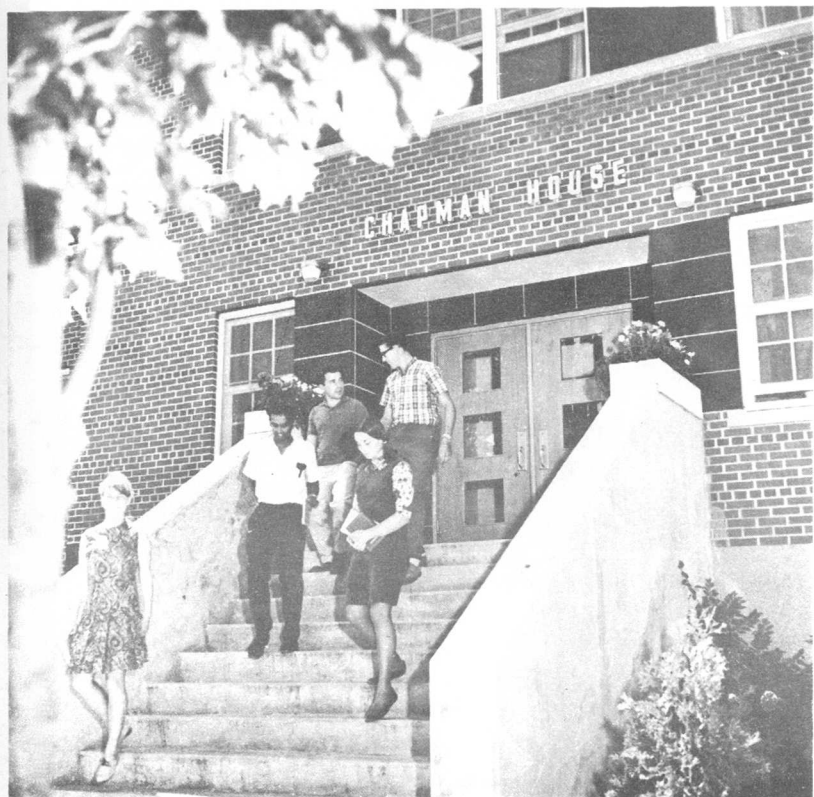
Students who lose time from classes due to participating in outside games will not receive an attendance credit for the time lost.

THE COLLEGE WINTER FAIR

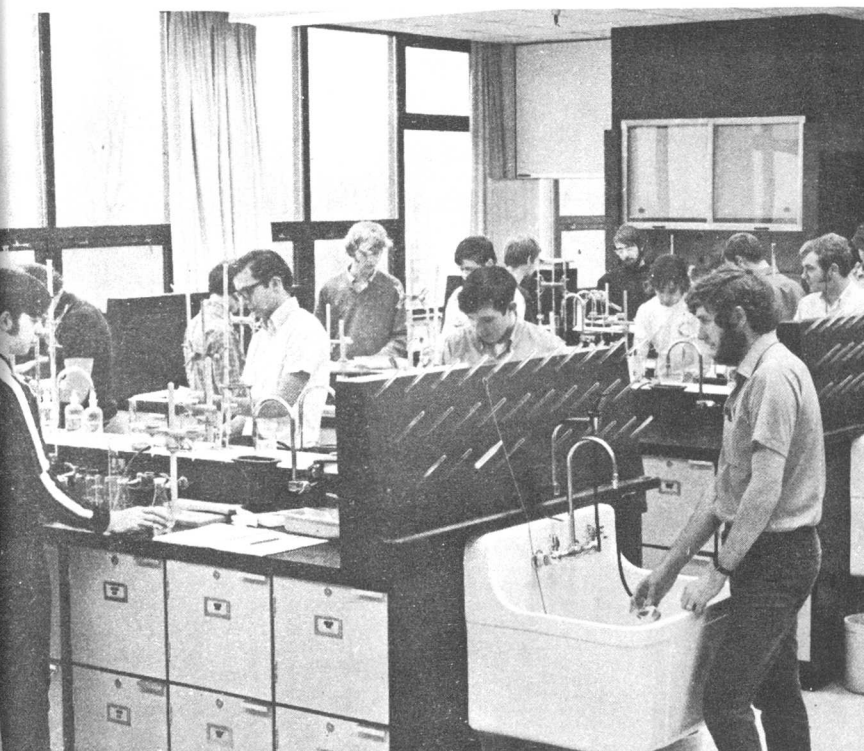
During each College year, the students put on a College Winter Fair, or College Royal, as it is frequently called. The show is a competition in fitting and showmanship rather than a contest among the horses, cattle, sheep, swine and poultry used in the exhibition.

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

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



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.

THE COLLEGE DIPLOMA

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) be at least sixteen years of age on or before the opening day of the College year;
- (b) be of good moral character;
- (c) present a satisfactory medical certificate dated not more than thirty days prior to registration;
- (d) present certificates showing an average of at least 60% with no mark below 50% in Grade XII (*Nova Scotia 012 or New Brunswick 121 or 122 or their equivalent) English, Mathematics, Chemistry, Biology or Physics and one additional subject.

Graduates of Prince Edward Island Grade XII will be considered on an individual basis.

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.

Candidates for admission must offer the results of SACU or comparable tests.

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 a 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. 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.) 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 302 (Principles of Ecology)	2
✓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 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 200 (Statistics and Experimentation)	3
Physics 200 (Electrical Phenomena)	3
Plant Science 250 (Greenhouse and Floriculture)	3
Sociology 100, 150 or 151	3
Philosophy 100 (Introduction to Philosophy)	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)
- ✓Chemistry 102 (Engineering Chemistry I)
- English 200 (Modern Literature and Writing)

Mathematics 100 (Calculus I)

Physics 102

Plant Science 101

SEMESTER II

Biology 150 (Zoology)

Chemistry 152 (Engineering Chemistry II)

Economics 150 (Introductory)

English 250 (Canadian Literature and Public Speaking)

Mathematics 150 (Calculus II)

Physics 152

SEMESTER III

✓ Engineering 200 (Principles and Applications
of Orthogonal Projection)

✓ Engineering 201 (Introductory Statics)

✓ Engineering 202 (Agricultural Structures)

✓ Engineering 203 (Agricultural Mechanization)

✓ Mathematics 201 (Mathematics for Engineers I)

Physics 201

Biology 202 (Microbiology)

SEMESTER IV

Engineering 250 (Graphics in Design)

Engineering 251 (Advanced Statics)

Engineering 252 (Surveying)

Mathematics 251 (Mathematics for Engineers II)

Animal Science 150

Physics 251

SEMESTER V

✓ Engineering 300 (Strength of Materials)

✓ Engineering 301 (Dynamics of Particles)

✓ Engineering 302 (Fluid Mechanics)

✓ Mathematics 300 (Differential Equations I)

✓ Mathematics 200 (Statistics)

Physics 300 (Electric Circuits I)

SEMESTER VI

Engineering 350 (Advanced Strength of Materials)
Engineering 351 (Dynamics of Rigid Bodies)
Engineering 352 (Thermodynamics)
Mathematics 350 (Differential Equations II)
Physics 350 (Electric Circuits II)
Chemistry 201 (Principles of Soil Science)
Economics 250 (Economics of Agriculture)

DESCRIPTION OF COURSES

The following courses are arranged for the 1973-1974 academic year. The Faculty reserves the right to make any revisions or additions which may be necessary.

Agriculture 150: History of Agriculture

Instructor: **Mr. 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: **Mr. Matthewson and Dr. Sefton**

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.

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

Text: Campbell and Lasley, **THE SCIENCE OF ANIMALS THAT SERVE MANKIND**

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: **Miss 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 co-ordination 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: **Dr. MacFadden**

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: **Mr. 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: **Mr. Porth**

An introduction to the structure and function of pro-caryotic 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, the nerve impulse, contraction in skeletal muscle and vision.

Fall Semester — 3 lecs. per week

Text: Loewy and Siekevitz, CELL STRUCTURE AND FUNCTION

Biology 202: Microbiology for Engineers

Instructor: **Mr. Porth**

A general survey of the microbial world with emphasis on types of microorganisms, naming, structure, methods of culturing, growth and nutrition, methods of control, and relation to disease in man and plants. Special attention will be given to the microbiology of water, sewage, air, milk, foods and soil. The role of microorganisms in pollution and industry will be discussed.

Fall Semester — 3 lecs. per week

Biology 250: Microbiology

Instructor: **Mr. Porth**

A general introduction to microbiology. Topics will include history, the principles of morphology, physiology, classification, genetics and methods of culture and isolation. The relation of microorganisms to agriculture, industry, veterinary science, public health and sanitation will be discussed.

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

Text: Carpenter, MICROBIOLOGY, (3rd edition)

Biology 255: Plant Physiology

Instructor: **Miss Levy**

A study of the different functions of the 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 302: Principles of Ecology

Instructor: **Miss Levy**

An introductory course to give ecological principles at the level of the individual, the population and the 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: **Mr. 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: to be selected

Chemistry 102: Engineering Chemistry I

Instructor: **Mr. MacLean**

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

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

Chemistry 150: Organic Chemistry

Instructor: **Mr. Hawley**

Prerequisite: **Chemistry 100**

A study of basic classes of organic compounds including alkanes, alkenes, alkynes, petroleum and petrochemicals, cycloparaffins, alcohols, aldehydes, ketones, alkyl halides, monocarboxylic acids, acid halides, acid anhydrides, salts, 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: Mr. MacLean

Prerequisite: Chemistry 102

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

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

Text: Munroe, CHEMISTRY IN ENGINEERING

Chemistry 200: Biochemistry I

Instructor: Mr. 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: to be selected.

Chemistry 201: Introduction to Soil Science

Instructor: Mr. 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: to be selected

Chemistry 250: Biochemistry II

Instructor: Mr. 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: to be selected

Communications 255: Extension Methods

Instructor: **Communications staff**

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: Basic Managerial Accounting

Instructor: **Mr. Arnfast**

This course is designed to provide a background of accounting information that is useful to management in the recognition and solution of management problems. Emphasis will be placed on the interpretation of financial statements. Both lectures and case material are used in the course.

Fall Semester — 1 lec. and 2 labs. per week

Text: to be chosen

Economics 150: Principles of Economics

Instructor: **Mr. Arnfast**

An introduction to the study of Economics. The course is designed to acquaint the student with the main elements of economic theory; a great deal of emphasis is placed on the application of theory in the Canadian economy. The main topics covered are: the economic problem and the evolution of our market economy, national income analysis, money and banking, the price system and resource allocation. Other topics such as international trade, economic growth and economic development are examined in less detail.

Spring Semester — 3 lecs. per week

Text: Heilbroner, THE ECONOMIC PROBLEM

Economics 200: Principles of Marketing

Instructor: **Mr. Arnfast**

The nature and importance (functions) of the agricultural marketing system; review of the micro-economic

theory basis of markets and market prices; market structures; marketing margins and efficiency; marketing organizations; provincial and federal government jurisdiction and policies; types and uses of marketing studies; the marketing of the major agricultural commodities in Canada.

Fall Semester – 3 lecs. per week

Economics 204: **Production Economics**

Instructor: **Mr. 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 250: **Economics of Agriculture**

Instructor: **Mr. Rose**

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: **Mr. 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. per week

English 200

Instructor: **Mr. 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. Thoreau, *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: **Mr. Sanger**

Canadian authors: as much as the size of enrollment 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 to study and translate French Canadian poetry.

Spring semester – 3 periods per week

Engineering 200: Principles and Applications of Orthogonal Projection

Instructor: **Dr. Gilkie**

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

Fall Semester – 1 lec. and 3 labs. per week

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

Engineering 201: **Introductory Statics**

Instructor: **Mr. MacAulay**

This course deals with a study of forces acting on particles 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 – 2 lecs. and 1 lab. per week

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

Engineering 202: **Agricultural Structures**

Instructor: **Mr. 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: **Mr. 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: Bainer, Kepner and Barger, PRINCIPLES OF FARM MACHINERY

Reference Text: Smith, FARM MACHINERY AND EQUIPMENT

Engineering 250: **Graphics in Design**

Instructor: **Dr. Gilkie**

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

aimed at developing creativity in the design process.

Spring Semester – 1 lec. and 3 labs. per week

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

Engineering 251: **Advanced Statics**

Instructor: **Mr. 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 – 2 lecs. and 1 lab. per week

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

Engineering 252: **Surveying**

Instructor: **Mr. 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 up to a week after exams in field exercises depending on weather during the term.)

Text: Kissam, SURVEYING PRACTICE

Engineering 300: **Strength of Materials**

Instructor: **Mr. 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**

Instructor: **Mr. MacAulay**

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: **Mr. 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 – 2 lecs. and 2 labs. per week

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

Engineering 350: **Advanced Strength of Materials**

Instructor: **Mr. 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, Ohlson, Stiles, Weese, MECHANICS OF MATERIALS, (2nd edition)

Engineering 351: **Dynamics of Rigid Bodies**

Instructor: **Mr. MacAulay**

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: **Mr. 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 – 2 lecs. and 2 labs. per week

Text: VanWylen & Sonntag, **FUNDAMENTALS OF CLASSICAL THERMODYNAMICS**, Wiley

Mark, **THERMODYNAMICS**, Prentice Hall

Genetics 200: Introduction to Genetics

Instructor: **Dr. PadmaNathan**

Prerequisite: **Biology 100**

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

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

Text: Gardner, **PRINCIPLES OF GENETICS**

Genetics 250: Advanced Genetics

Instructor: **Dr. 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 – 3 lecs. and 2 labs. per week

Texts: Gardner, **PRINCIPLES OF GENETICS**

Brewbaker, **AGRICULTURAL GENETICS**

Mathematics 100: Calculus and Analytic Geometry I

Instructor: **Mr. 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: Mr. 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 100, topics from Analytic Geometry will be covered at appropriate stages of this course.

Spring Semester – 3 lecs. per week

Text: Goodman, ANALYTIC GEOMETRY AND THE CALCULUS

Mathematics 200: Statistics and Agricultural Experimentation

Instructor: Dr. PadmaNathan

Prerequisite: Mathematics 100

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

Fall Semester – 3 lecs. per week

Text: Steele and Torrie, PRINCIPLES AND PROCEDURES OF STATISTICS

Mathematics 201: Mathematics for Engineers I

Instructor: Mr. Fraser

Prerequisite: Mathematics 100, 150

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.

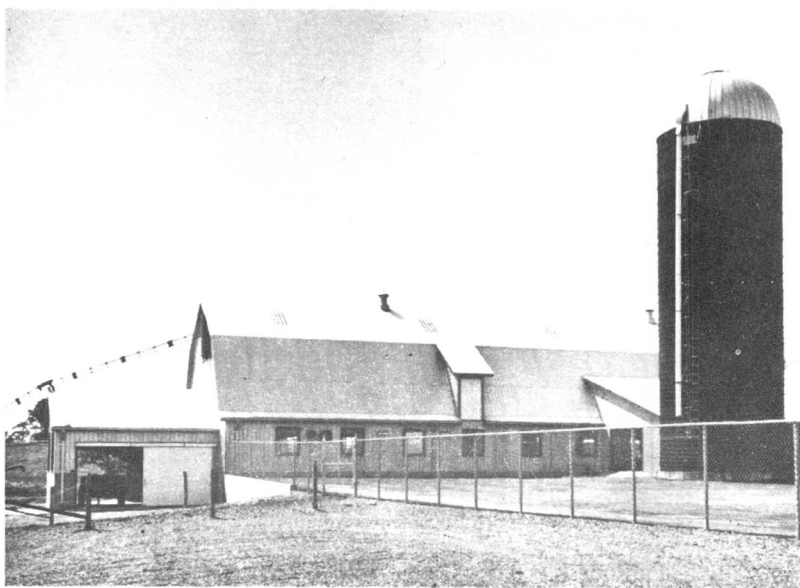
Fall Semester – 3 lecs. per week

Text: Johnson and Kiokemeister, CALCULUS WITH ANALYTIC GEOMETRY

Mathematics 251: Mathematics for Engineers II

Instructor: Mr. 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: Johnson and Kiokemeister, **CALCULUS WITH ANALYTIC GEOMETRY**

Mathematics 300: Differential Equations I

Instructor: **Mr. 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: **Mr. 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.**

Philosophy 100: Logic and Philosophical Methods

An introduction to the basic techniques of logic and philosophical methods.

Fall Semester – 3 lecs. per week

Physics 100: Introductory Physics

Instructor: **Mr. Smith**

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: **Mr. Saxon**

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

Physics 150: Modern Physics

Instructor: **Mr. Smith**

A treatment of the conceptual foundations including mass, length, time, kinematics, Newton's laws, frames of reference, relative motion including Galileon Relativity and Special Relativity, Momentum, energy, and the conservation principle and the conceptual foundations.

The quantum nature of energy and an introduction to

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

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

Physics 152

Instructor: **Mr. 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 physical problems.

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

Physics 200: **Electrical Phenomena**

Instructor: **Mr. Smith**

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

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

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

Physics 201

Instructor: **Mr. Saxon**

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: **Mr. 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: Electric Circuits I

Instructor: **Mr. Smith**

Prerequisite: **Mathematics 201, 251**

Physics of electric fields, potential, capacitance, 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: **Mr. Smith**

Prerequisite: **Mathematics 201, 251**

The magnetic field, Ampere's Law, Faraday's Law, Inductance, Magnetic properties of Matter, alternating 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: **Dr. Bubar**

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

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

Plant Science 101: **General Plant Science**

Instructor: **Mr. Shuh**

An introductory course in plant science for engineering students. The course will deal with the identification and production of some of the more common crop plants. Special attention will be given to the problems related to 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: **Dr. Wray and Mr. Badcock**

Construction and equipment of greenhouses and related structures. Principles and practices of propagation, culture, storage and marketing of greenhouse vegetables and florist crops.

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

Sociology 100

Instructor: **Mr. MacEachern**

Through assigned readings and in lectures, students are given an insight into basic sociological concepts. Emphasis is placed upon man's antiquity, man's nature and man in community with concern for some of the issues confronting contemporary society including an examination of specific sub-cultures.

Fall Semester – 3 lecs. per week

Texts: Shinn, R., **THE TANGLED WORLD**

Adams, I., **THE POVERTY WALL**

Frankl, V., **MAN'S SEARCH FOR MEANING**

and other assigned readings

Sociology 150

Instructor: **Mr. MacEachern**

A comprehensive study of community structure will be made. The relationships between technology, environment,

and human values, morals, and decision making are considered.

Spring Semester – 3 lecs. per week

Texts: Shinn, R., THE TANGLED WORLD

Keeling, M., MORALS IN A FREE SOCIETY

and other assigned readings

151: Sociology (Personnel Relations)

The development and management of human resources are studied as they apply to several types of Canadian business organizations. Recruiting and selection, interviewing techniques, testing, performance appraisal, wage and salary administration, labor relations and characteristics of bureaucracy are examined in detail. The student is also introduced to the styles and schools of personnel management.

Spring Semester – 3 lecs. per week

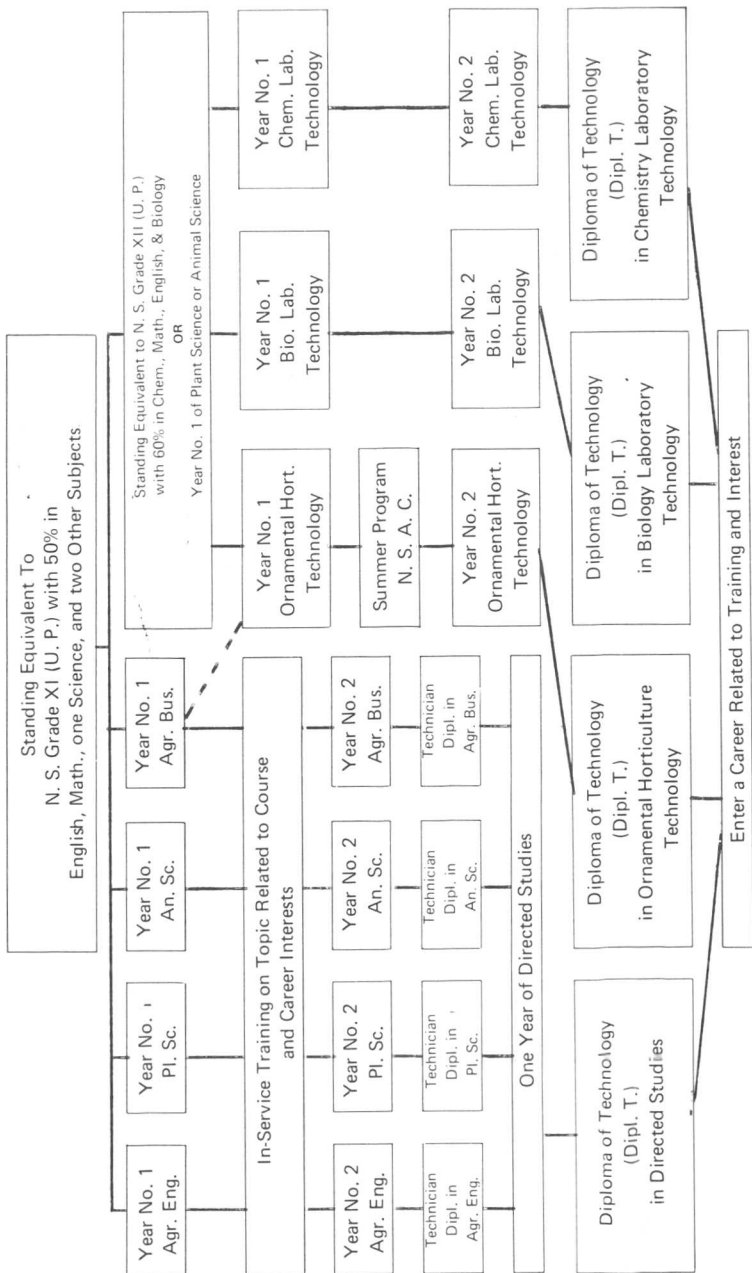
Text: McLeod, PERSONNEL MANAGEMENT FOR CANADIANS



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; and

(c) must present evidence for the following academic prerequisites that refer to the candidate's home province.

(i) Nova Scotia:

Grade XI (University Prep.) including English, Mathematics, one science, and two other subjects. Students with Grade XII marks above 60% in English, Mathematics, Biology or Chemistry may ask for credit in corresponding subjects.

(ii) New Brunswick:

The high school program must contain satisfactory completion of Grade XII English, as well as Mathematics, one science, and two additional subjects at the 112 level or higher. Students with marks above 60% in 121 or 122 level Mathematics, English, Biology or Chem-

istry may ask for credit in corresponding subjects.

(iii) Prince Edward Island:

Grade XII (University Prep.) including English, Mathematics, one science, and two other subjects, or satisfactory completion of a foundation program at Holland College.

(iv) Newfoundland:

Grade XI (University Prep.) including English, Mathematics, one science, and two other subjects.

(v) Applicants of mature age or from general course programs can be considered if they give evidence of probable success.

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 per cent.

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 27 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.

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.

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.



In-Service Training

All first year students will be strongly encouraged to complete a period of in-service training during the summer between their first and second years. A statement of in-service training will appear on the student's record as evidence of supplementary training.

AGRICULTURAL BUSINESS SYLLABUS

FIRST ACADEMIC YEAR

		First Lec.	Term Lai.	Sec. Lec.	Term Lab.
E 10	English (sales section required)	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	Biology	2	4	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 Lec.	Term Lib.	Sec. Lec.	Term Lab.
100	Sociology	3			
151	Sociology			3	
204	Production Economics	2	4		
254	Farm Management			3	2
AB23(a)	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
*PS26	Vegetable Production	3	2	3	2
	OR				
*AS10(a)	Livestock Production (Ruminant Animals)	3	2		
	AND				
AS12(b)	Livestock Production (Poultry and other non-ruminant animals)			3	2
	Project				

*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	Sec. Term		
		Lec.	Lab.	Lec.	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	Biology	2	4	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	Sec. Term		
		Lec.	Lab.	Lec.	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		

	First Lec.	Term Lab.	Sec. Lec.	Term Lab.
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	
Projects				

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

SECOND ACADEMIC YEAR

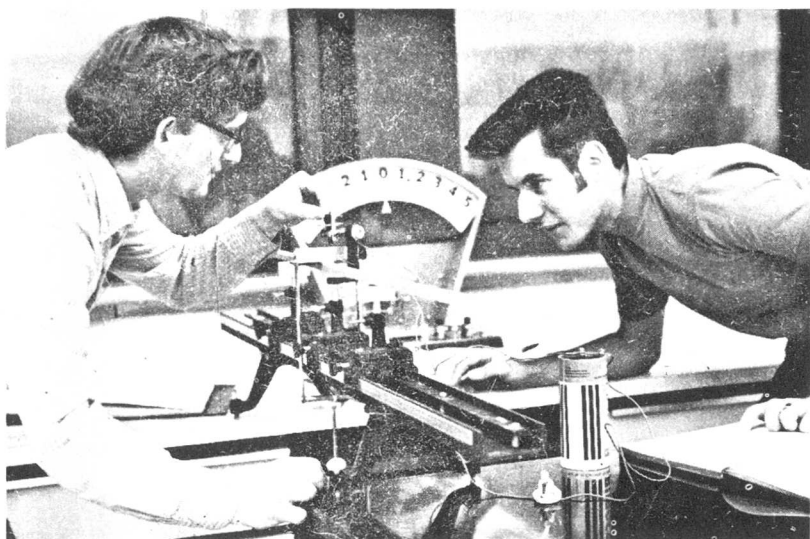
		First Lec.	Term Lab.	Sec. Lec.	Term Lab.
100	Sociology*	3			
150	Sociology*			3	
	or				
151	Sociology*			3	
B 20(a)	Plant Identification*	2	2		
B 22(b)	Plant Physiology*			2	2
PS 22(b)	Plant Propagation*			1	2
B 21(b)	Plant Pathology*			2	3
AE 20	Power and Machinery* Projects*	2	2	2	2
PS 24	Greenhouse Crops Production**	1	2	1	2
AE 21(b)	Electrical Controls**			1	3
PS 26	Vegetable Production**	3	2	2	2
PS 21(b)	Fruit Production**			2	4
PS 20	Field Crops Production**	2	2	2	2
AE 15(a)	Surveying**	1	2		
AE 26(a)	Soil and Water Management**	2	2		
PS 25	Turf Management**	2	2	2	2
PS 27	Ornamental Horticulture**	2	2	2	2
AE 27(a)	Horticultural Machinery**	2	2		

* Required Subjects

** Subjects involving a minimum of eight additional lecture hours per week per year to be selected from this group in consultation with the instructor in the principal field of interest and the Dean of Vocational and Technical Training.

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.



AGRICULTURAL ENGINEERING SYLLABUS

FIRST ACADEMIC YEAR

		First Lec.	Term Lab.	Sec. Lec.	Term Lab.
E 10	English	3		3	
M 10	Appliable Mathematics	3		3	
C 11(a)	Soils (Chemistry and Physics)	2	2		
AB 11	Economics	3		3	
M 11	Physics	2	2	2	2
AE 11(b)	Properties of Materials			1	2
AE 12	Drafting		3		3
PS 10	Plant Science	2	2	2	2
AE 13	Shopwork	1	4	1	4
AE 15(a)	Surveying	1	2		
	Physical Education (Elective program to be arranged)				
AB 12(b)	Work Simplification — one week				

SECOND ACADEMIC YEAR

		First Lec.	Term Lab.	Sec. Lec.	Term Lab.
100	Sociology	3			
150	Sociology			3	
	or				
151	Sociology			3	
AE 22	Farm Buildings	2	4	2	4
AE 23	Farm Power	2	4	2	4
AE 24	Farm Machinery	2	4	2	4
AE 25(b)	Hydraulics			2	2
AE 21(b)	Electrical Controls			1	3
AS 10(a)	Livestock Production (ruminant animals) . .	3	2		
AS 12(b)	Livestock Production (poultry and other non-ruminant animals)			3	2
	Projects				
AE 26(a)	Soil and Water Management	2	2		

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.

AB 10: Accounting

Instructor: **Mr. Arnfast**

Basic accounting procedures are stressed. Actual project work with farm and farm-related business records helps the student to better understand inventories, assets, liabilities, owner's equity, changes in owner's equity, working capital, record book organization, preparing monthly statements, and closing the books. Accounting techniques for several forms of business organizations are examined. Some time is devoted to banking procedures and payroll bookkeeping.

The interpreting of financial records for income tax and Canada Pension plan purposes is covered. By making comparisons of actual balance sheets, the financial structure, variations in current position, and several trends are identified. The importance of records for management decisions is stressed.

Pl. Sc. (elective),

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

AB 11: Economics

Instructor: Mr. Tait

This course studies the historical development of the Canadian economy. The student is introduced to the basic concepts of national income, banking, public monetary and fiscal policy and trade. The development and structure of Canadian and Atlantic Region agriculture are studied.

The importance and costs of each function comprising the entire marketing process are examined. The course includes a study of consumer and supplier behaviour, pricing, price stability in various types of market structures, an examination of the various kinds of business organizations involved with marketing decisions, bargaining power, and the administration of quality control systems.

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

Pl. Sc. (elective), Agr. Eng., Agr. Bus., 1st year, both terms – 3 lecs. per week

Text: Still and Cundiff, **ESSENTIALS OF MARKETING**

Reference Book: Kohls, **MARKETING OF AGRICULTURAL PRODUCTS**

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: **Mr. 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)

AB 23(a): Business Administration

Instructor: **Mr. MacLeod**

This course presents the student with a background to the business environment – characteristics of the enterprise system and the range of business-government, business-community relationships. Particular emphasis will be given to an examination of the major activities and responsibilities undertaken by business managers.

Agr. Bus., 2nd year, 1st term – 3 lecs. per week

Text: Weimer, INTRODUCTION TO BUSINESS

AB 24(b): Applied Farm Management

Instructor: **Mr. 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: **Mr. 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: **Mr. 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. per week

Communications 255: Extension Methods

Instructor: **Communications staff**

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: **Mr. 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.

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

Text: Ashby, Dodge, Shedd, MODERN FARM BUILDINGS

AE 11 (b): Properties of Materials

Instructor: **Mr. 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: **Mr. 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 computing areas.

Ag. Eng., 1st year, both terms – 3 labs. per week

AE 13: Shopwork

Instructor: **Mr. Townsend**

The selection, maintenance and operation of workshop tools including power grinders, metal and wood lathes, sheet metal tools, portable wood working and metal working tools, acetelyene, electric and spot welding equipment along with the commonly used hand tools. Identification and heat treatment of metals will also be studied.

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

AE 15 (a): Surveying

Instructor: **Mr. 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 —
1 lec. and 2 labs. per week

Text: Kissam, **SURVEYING PRACTICE** (latest edition)

AE 20: Power and Machinery

Instructors: **Mr. 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: **Mr. Townsend**

This is a study of electrical controls and various types of switches such as limit, micro, mercury, remote control, photo-electric, etc.

⁴ The application of temperature and humidity controls for plant and animal environment.

Ag. Eng., Pl. Sc., 2nd year, 2nd term — 1 lec. and 3 labs.
per week

AE 22: Farm Buildings

Instructor: **Mr. Adams**

The design of livestock and service buildings, farmstead and building layouts, beam and truss selection, environmental control, lighting requirements, water supply and materials handling systems are studied. Emphasis is placed on the solution of practical problems. Tours of modern farmsteads will be arranged whenever possible.

Ag. Eng., 2nd year, both terms — 2 lecs. and 4 labs. per
week

AE 23: Farm Power

Instructor: Mr. Taylor

History and development of heat engines. The adjustment, maintenance and repair of farm diesel and gasoline engines are studied. The principles of operation and servicing of various types of tractor clutches, transmissions and differentials are investigated.

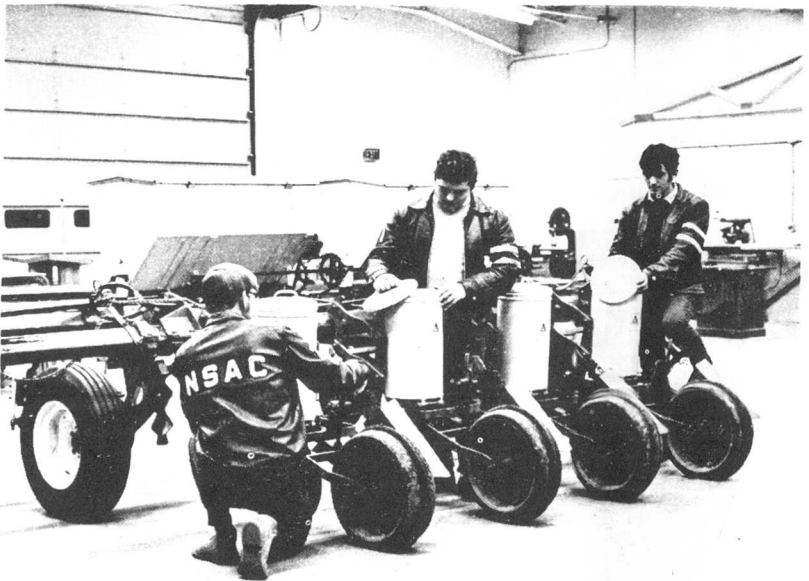
Ag. Eng., 2nd year, both terms – 2 lecs. and 4 labs. per week

AE 24: Farm Machinery

Instructor: Mr. Clark

The selection, care and operation of tillage, application and harvesting equipment are studied along with farmstead and crop processing equipment. The cost of owning and operating modern field machinery systems is investigated.

Ag. Eng., 2nd year, both terms – 2 lecs. and 4 labs. per week



AE 25 (b): Hydraulics
Instructor: **Mr. 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

AE 26 (a): Soil and Water Management
Instructor: **Mr. MacAulay**

In this course emphasis is placed on land drainage, irrigation systems, water storage structures and erosion control measures. Laboratory periods include practice in using surveying instruments and irrigation equipment and solving associated problems.

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

AE 27(a): Horticultural Machinery
Instructors: **Mr. Clark, Mr. 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

AS 10(a): Livestock Production (ruminant animals)
Instructor: **Dr. 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. Sci., 1st year, 1st term; Ag. Bus., Ag. Eng., 2nd year, 1st term – 3 lecs. and 2 labs. per week

AS 11 (b): Animal Husbandry Skills

Instructor: **Mr. Mathewson**

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

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

AS 12(b): Livestock Production (poultry and other non-ruminant animals)

Instructors: **Dr. Sefton and Dr. Curtis**

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.

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

AS 20 (a): Animal Nutrition

Instructor: **Dr. 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: **Mr. 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: Mr. 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

Instructor: Dr. Curtis and Dr. 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: Mr. 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: Dr. Crober

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

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

AS 28 (b): Animal Pathology

Instructor: **Dr. Mowbray**

Systems of sanitation and hygiene, promoting 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

B 10: Biology

Instructor: **Mr. Eaton**

This is a study of the biological principles that are most important in agriculture. The structure, growth and reproduction of both plants and animals are discussed, with an introduction to the study of genetics. The role of organic cycles, the relationship of plants and animals to their environment, the regulation of growth and development, and nutrition are included.

Agr. Bus., An. Sc., Pl. Sc., 1st year, both terms – 2 lecs. and 4 labs. per week

B 11 (b): Entomology

Instructor: **Mr. Neary**

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

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

B 20 (a): Plant Identification

Instructor: **Dr. Roland**

A course covering the classification and naming of plants with special attention given to plants of economic importance. These include the common weeds, trees and shrubs, and cultivated plants. The important plant families will be considered, along with laboratory work in identification.

Pl. Sc., 2nd year, 1st term – 2 lecs. and 2 labs. per week
Text: Jacques, HOW TO KNOW THE WEEDS

B 21 (b): Plant Pathology

Instructors: **Mr. Porth and Dr. MacFadden**

An introduction to the nature, cause and control of plant diseases due to bacteria, fungi, nematodes and viruses. Emphasis will be placed on the infection process, resistance, mechanisms, relation of environment to disease, development and methods of control. Representative diseases of plants caused by the above organisms will be discussed.

Pl. Sc., 2nd year, 2nd term – 2 lecs. and 3 labs. per week

Text: Agrios, PLANT PATHOLOGY

B 22(b): Plant Physiology

Instructor: **Miss Levy**

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

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

Text: Galston, THE LIFE OF THE GREEN PLANT

C 10: Basic Chemistry

Instructor: **Mr. Hawley**

A study of elements, compounds, atomic structure, bonding, and why reactions occur, is followed by a study of some specific reactions such as oxidation and reduction, neutralization and ionization; an introduction to Organic and Biochemistry. The basic chemical properties of some organics will be examined and related to the agricultural industry.

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

Text: to be selected

C 11: Soils (Physics and Chemistry)

Instructor: **Mr. Langille**

The physical properties of soils are examined with special

emphasis on soil profiles, soil textures, particle size, soil moisture, water retention, compaction, soil air, soil temperature, drainage, erosion, and tillage. Several types of Atlantic Provinces soil are examined.

The chemical properties of soil particles and solutions are studied as well as principal chemical reactions in soils. The function of soil as a medium to support plant life, fertilizing, liming, pH and plant nutrients are stressed. The selection, use, and effects of various chemical additives to the soil are discussed.

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

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

Laboratory Manual: Prepared mimeographed sheets

Text: to be selected

E 10: English

Instructor: **Mr. Sanger**

The course consists of three areas: literature, oral communication, and technical writing.

Instruction in literature emphasizes ideas and values and their relationship to the past and present. Oral communication involves the learning of meeting procedures, debates, and the presentation of oral reports. In technical writing, the student becomes familiar with basic bibliographical techniques, library usage, and report writing.

Ag. Eng., Agr. Bus., An. Sc., Pl. Sc., 1st year, both terms – 3 lecs. per week

Texts: Ernest Hemingway, *IN OUR TIME*

F. Scott Fitzgerald, *THE GREAT GATSBY*

Morley Callaghan, *SUCH IS MY BELOVED*

N. S. A. C. *STYLE MANUAL*

Other readings, including poetry, will be assigned.

M 10: Applicable Mathematics

Instructor: **Mr. Buckler**

Fractions, percentage, simple equations and word problems are reviewed and the slide rule and electronic calculator

are introduced. The essentials of Algebra, Analytic Geometry and Trigonometry, introductory basic Calculus and some elements of computer programming are covered. Emphasis is placed on finance problems involving interest, discounts, mortgages, consumer loans, etc.

Agr. Eng., Agr. Bus., An. Sc., Pl. Sc., 1st year, both terms – 3 lecs. per week

Text: Washington, BASIC TECHNICAL MATHEMATICS

M 11: Physics

Instructor: **Mr. Buckler**

A course designed to give students background in the basic physical principles employed in such applied fields as structures, machine design and operation, electric power applications and controls, etc.

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

Ag. Eng., 1st year, both terms – 2 lecs. and 2 labs. per week

Text: Pollock, APPLIED PHYSICS

Physical Education

Instructor: **Mr. Marchant**

That phase of education concerned with the teaching of skills and attitudes in play activities. A program providing each student with an opportunity to develop skill and understanding in a variety of sport activities that will serve him throughout life, and with unique opportunities in developing desirable character and social traits as well as defined responsibilities toward the physical development of the individual. The development of these traits, plus the objectives of increased strength and endurance, better motor skills, and improved health practices are the desirable outcomes of the physical education program.

Ag. Eng., Agr. Bus., An. Sc., Pl. Sc., 1st year (Elective program to be arranged)

Projects

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

Ag. Eng., Agr. Bus., An. Sc., Pl. Sc., 2nd year, both terms – time to be arranged

PS 10: Plant Science for Agricultural Engineers

Instructor: **Mr. Badcock**

Selected topics in elementary botany, choice of crops, seeds and seeding, crop management, weed control, harvesting, processing and preservation of important crop species.

Ag. Eng., 1st year, both terms – 2 lecs. and 2 labs. per week

Recommended reference text: Martin and Leonard, **PRINCIPLES OF FIELD CROP PRODUCTION**

PS 20: Field Crops Production

Instructor: **Dr. Bubar**

A study of grasses, legumes and other crops used in a forage program. Production, management, harvesting, storage and utilization practices suited to the various crops are studied. The development of forage programs is undertaken. The production, harvesting and storing of the common cereals are studied, along with their agronomic uses. Consideration is given to other Canadian crops not grown in the Atlantic region.

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

Text: Martin and Leonard, **PRINCIPLES OF FIELD CROP PRODUCTION**

PS 21 (b): Fruit Production

Instructor: **Mr. Badcock**

This course includes both small fruit culture and tree fruits. The practices involved in the production of strawberries,

blueberries, raspberries, blackberries, currants, gooseberries and cranberries and the practices carried out in orchard operations are studied.

Pl. Sc., 2nd year, 2nd term – 2 lecs. and 4 labs. per week

PS 22 (b): Plant Propagation

Instructor: **Mr. 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.

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

PS 24: Greenhouse Crops Production

Instructor: **Mr. Badcock**

This course deals first with the types of houses in which crops are presently grown and the associated heating plants and controls. The general practices involved in successful operation such as heating, ventilation, watering, fertilizing, leaching, spraying, and sterilizing are studied. The culture of the individual greenhouse vegetable crops and the important florist crops is also covered in detail both in the classroom and the associated greenhouses.

Pl. Sc., 2nd year, both terms – 1 lec. and 2 labs. per week

PS 25: Turf Management

Instructor: **Dr. Wray**

This course will deal with current production and management practices for turf culture. Establishment of new grass areas and the maintenance of established turf will be covered.

The specific production and maintenance practices for a wide variety of purposes will be included.

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

PS 26: Vegetable Production

Instructor: **Dr. Wray**

Botanical and horticultural characteristics of garden and commercial vegetable crops are studied and related to the changing patterns of production technology. Crops studied in detail include root and tuber vegetables, cole crops, peas, beans, salad and green crops. Potato production and quality is a major topic. Marketing methods and requirements are considered.

Agr. Bus., Pl. Sc., 2nd year, both terms – 3 lecs. and 2 labs. per week

PS 27: Ornamental Horticulture

Instructor: **Mr. Morley**

Fundamental principles and industry practices of growth, moving, maintenance, and use of horticultural plants for the residential, commercial, and recreational landscape. Aimed at providing sufficient practical background for the student to analyze the situation and to develop suitable solutions for the problem.

Orn. Hort., 1st year; Pl. Sc., 2nd year; both terms – 2 lecs. and 2 labs. per week

100: Sociology

Instructor: **Mr. MacEachern**

Through assigned readings and in lectures, students are given an insight into basic sociological concepts. Emphasis is placed upon man's antiquity, man's nature and man in community with concern for some of the issues confronting contemporary society including an examination of specific sub-cultures.

Agr. Bus., Agr. Eng., An. Sc., Pl. Sc., 2nd year, 1st term
– 3 lecs. per week

Texts: Shinn, R., THE TANGLED WORLD

Adams, I., THE POVERTY WALL

Frankl, V., MAN'S SEARCH FOR MEANING

and other assigned readings

150: Sociology

Instructor: Mr. MacEachern

A comprehensive study of community structure will be made. The relationships between technology, environment, and human values, morals, and decision making are considered.

Agr. Bus., Agr. Eng., An. Sc., Pl. Sc., 2nd year, 2nd term
– 3 lecs. per week

Texts: Shinn, R., THE TANGLED WORLD

Keeling, M., MORALS IN A FREE SOCIETY
and other assigned readings

151: Sociology (Personnel Relations)

The development and management of human resources are studied as they apply to several types of Canadian business organizations. Recruiting and selection, interviewing techniques, testing, performance appraisal, wage and salary administration, labor relations and characteristics of bureaucracy are examined in detail. The student is also introduced to the styles and schools of personnel management.

Agr. Bus., Agr. Eng., An. Sc., Pl. Sc., 2nd year, 2nd term
– 3 lecs. per week

Text: McLeod, PERSONNEL MANAGEMENT FOR CANADIANS

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 and with the practice of Ornamental Horticulture. These studies lead to a Diploma of Technology (Dipl. T.) in Chemistry, a Diploma of Technology (Dipl. T.) in Biology or a Diploma of Technology (Dipl. T.) in Ornamental Horticulture.

A. Technology Studies for Graduate Technicians

A candidate who has received his Technician Diploma in Agricultural Business, Agricultural Engineering, Animal Science, 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 satisfactorily complete the first year of a Technician Course in Animal Science, Plant Science or Agricultural Business;

(2) he may complete Grade XII (N. S. 012, N. B. 122) 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 descriptions are found on the pages following the technician or degree syllabi.

C. Syllabus for Biology Laboratory Technology

FIRST YEAR

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

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

SECOND YEAR

		First Lec.	Term Lab.	Sec. Lec.	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		4		4
M 30(a)	Basic Statistics	3			
AB 31	Office Practices (including Work Simplification)		2		2
C 35(a)	Glass Blowing		1		
C 36(b)	Seminar			1	
M 31(b)	Computer Programming	Equivalent of one lec- ture per week, 2nd term			

E. Syllabus for Ornamental Horticulture Technology

FIRST YEAR

		First Lec.	Term Lab.	Sec. Lec.	Term Lab.
AE15(a)	Surveying	1	2		
PS 27	Ornamental Horticulture	2	2	2	2
B20 (a)	Plant Identification	2	2		
B22 (b)	Plant Physiology			2	2
C11	Soils	2	2	2	2
AE10	Agricultural Engineering	2	2	2	2
PS22 (b)	Plant Propagation			1	2
B21 (b)	Plant Pathology			2	1
B11 (b)	Entomology			2	2
PS25	Turf Management	2	2	2	2
AE27 (a)	Horticultural Machinery	2	2		
AE12(b)	Work Simplification	One week			

(Students entering from the Technician program will receive credit for satisfactory completion of C11, AE10, B11 (b) and AB12 (b).

SUMMER PROGRAM

- AE30 (s) Landscape construction methods and materials (equivalent to a two lecture and four laboratory period course for one term – scheduled by arrangement)
- PS31 (s) Landscaping techniques (thirty lecture hours and three hundred hours of grounds work)
Project (equivalent to one term course)

SECOND YEAR

		First Lec.	Term Lab.	Sec. Lec.	Term Lab.
AB10	Accounting	2	2	2	2
AE31	Art and Design	3		3	
100	Sociology	3			
151	Sociology			3	
C30	Plant Nutrition	2	2	2	2
PS32	Landscape Design	3	6	3	6
PS24	Greenhouse Crops Production	1	2	1	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 1973-1974 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: Mr. 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: **Mrs. 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

AE 30 (s): Landscaping

Landscape construction methods and materials (equivalent to a two lecture and four laboratory period course for one term.) Scheduled by arrangement during the summer.

AE 31: 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

AS 30 (b): Advanced Animal Nutrition

Instructor: **Dr. 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: **Miss 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

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

B 32 (b): Microbiology

Instructor: **Mr. Porth**

An introduction to the science of microbiology. Lectures will be concerned with the concepts of microbial classification, naming, growth and nutrition, culturing, metabolism, disease and industrial applications. Laboratory work will stress the principles of staining, preparation of microbiological media, culturing, biochemical tests and interpretation of results.

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

Text: Pelczar and Reid, MICROBIOLOGY (second edition)

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: Miss 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 – 2 lecs. and 4 labs. per week

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

C 30: Plant Nutrition

Instructors: Miss Levy, Mr. Badcock, Mr. Langille and Mr. MacLean

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

C 31: Qualitative and Quantitative Analysis

Instructors: Mr. Hawley and Mr. MacConnell

Using modern chemical methods to evaluate the qualitative nature of inorganic and organic agricultural materials,

gravimetric, spectro-chemical, chromatographic, volumetric and titrimetric quantitative methods.

Both terms – 2 lecs. and 4 labs. per week

Text: To be announced

C 32: Instrumentation

Instructor: **Mr. MacLean**

Use of modern instrumentation in the Chemistry Laboratory including atomic absorption, gas chromatography, spectroscopy, colorimetry, fat, fibre, Kjeldahl, soil and tissue determination, collection and preparation of samples for analysis.

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

Text: To be announced

C 33 (b): Laboratory Organization, Records and Reports

Instructor: **Mr. 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.

C 34: Technical Projects and Reports

Instructors: **Mr. MacLean and Mr. 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.

Both terms – 4 labs. per week

C 35 (a): Glass Blowing

Instructor: **Mr. 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.

C 36 (b): Seminar

Instructors: **Chemistry Staff**

Planning, researching, preparation and presentation of papers by students on a selected or assigned topic within the chemistry area.

2nd term – 1 lec. per week

255: Communications

Instructors: **English Staff**

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: **Mr. 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: **Dr. 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: Clark, **STATISTICS & FIELD EXPERIMENTATION**

M 31 (b): Computer Programming

Instructor: **Mr. Fraser**

This course provides an introduction to the methods of Computer Programming through the BASIC language. Stu-

dents will become familiar with the operation of a time-sharing system by running their own programs.

2nd term – equivalent of one lecture per week

PS 30 (b): Advanced Field Crops

Instructor: **Dr. 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

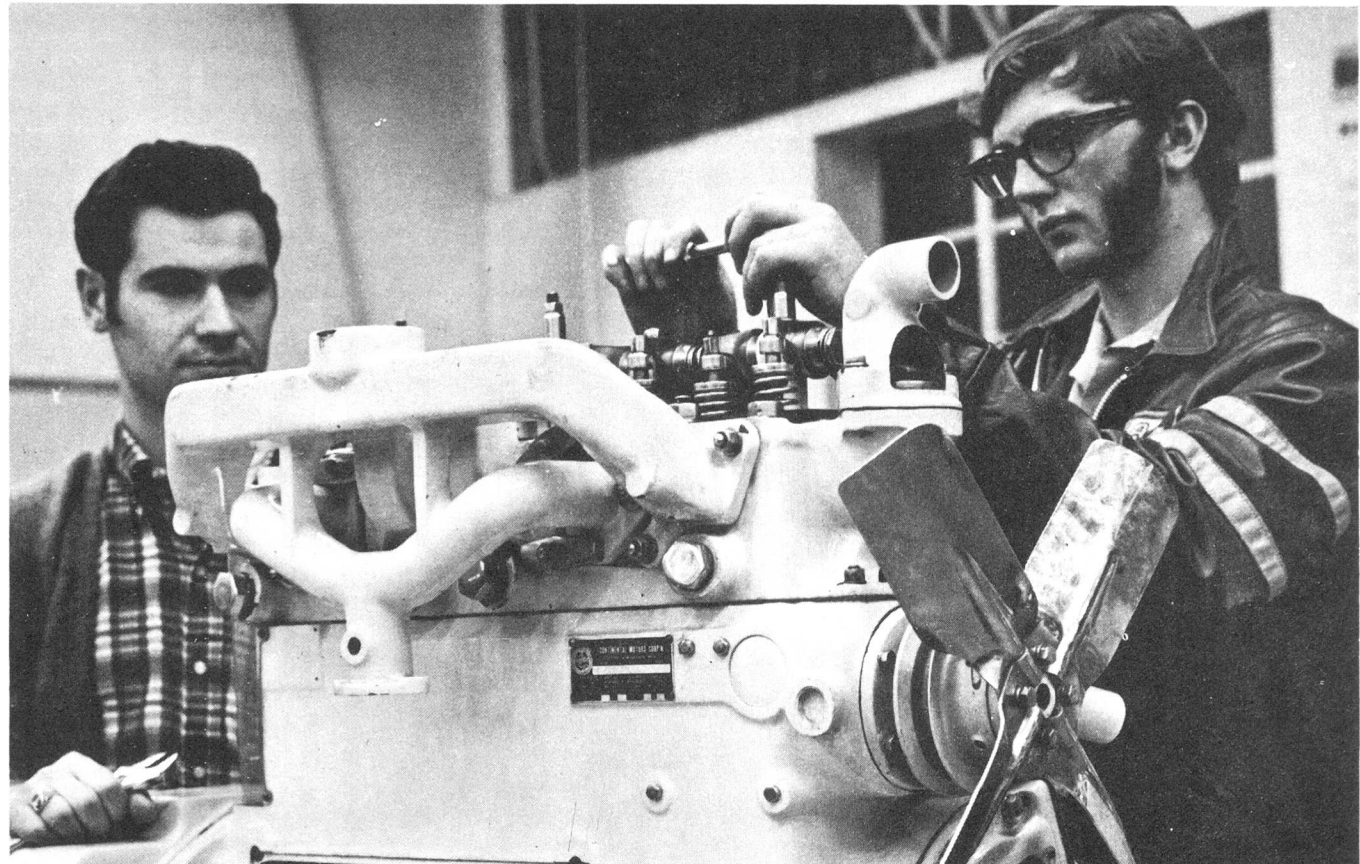
A summer course in which students learn techniques in maintenance of lawns, flower beds, shrubs and hedges; lawn seeding and sodding; moving trees and shrubs, pruning and tree surgery. Students participate in implementing design plans from blueprints.

PS 32: Landscape Design

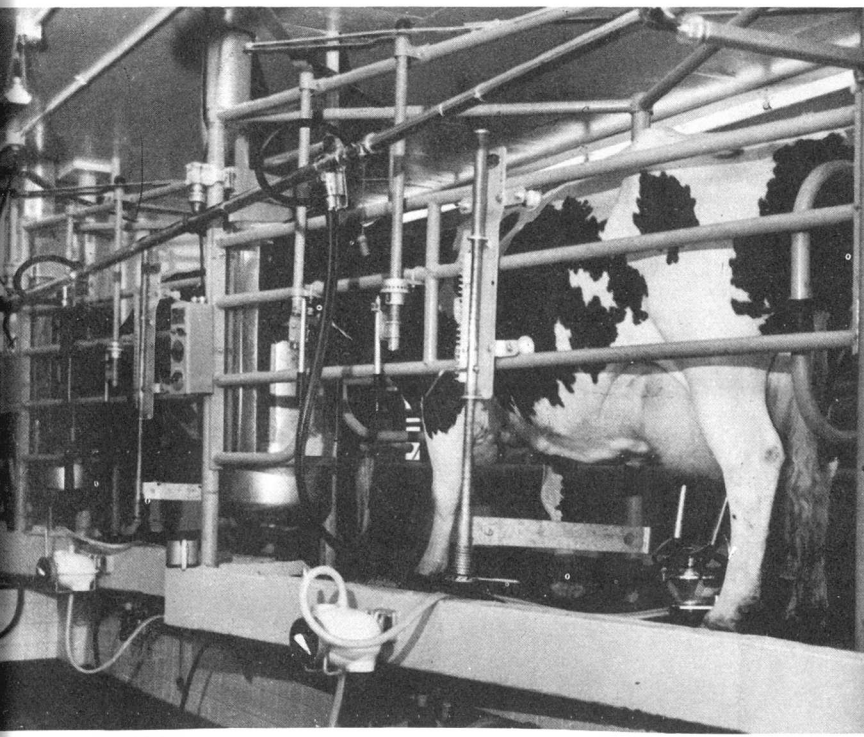
A course with special emphasis on the systematic approach to site planning and design, theory analysis, graphics, and application to projects in the design of private and public recreational, commercial, and residential facilities.

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





VOCATIONAL
COURSES



VOCATIONAL COURSES

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

The following courses were planned for the 1972-73 year. Similar, but not necessarily the same, courses will be planned for the 1973-74 year.

Meat Cutting	September 11 - December 15, 1972
General Agriculture	September 11 - April 27, 1973
Stable Management	September 18 - December 8, 1972
Land Clearing for Crop Production	September 25 - September 29, 1972
Farrier Training (20 successive Saturdays)	October 7 - February 17, 1973
Power Saw Operation & Safety	October 30 - November 3, 1972
Artificial Insemination	ON DEMAND
Farrier Training	November 6 - December 1, 1972
Maple Sap Production	November 13 - November 17, 1972
Power Saw Operation & Safety	November 13 - November 17, 1972
Power Saw Operation & Safety	December 11 - December 15, 1972
Power Saw Operation & Safety	December 27 - January 3, 1973
Meat Cutting	January 2 - April 6, 1973
Stable Management	January 2 - March 23, 1973
Tree Fruits Production	January 15 - January 19, 1973
Floral Design	January 15 - January 19, 1973
Operation & Repair of Farm Machinery	January 22 - January 26, 1973
*Dairy Herd Methods & Skills (Port Hawkesbury)	January 22 - March 16, 1973
**Dairy Herd Methods & Skills	January 22 - March 16, 1973
Turf Production	January 22 - February 16, 1973
Retailing Farm Supplies	January 29 - February 3, 1973
Artificial Insemination	ON DEMAND
Mink Production (Church Point)	February 5 - February 9, 1973
Strawberry Production	February 5 - February 9, 1973
Swine Herd Management	February 5 - February 16, 1973
Christmas Tree Production	February 12 - February 16, 1973
Beef Production	February 19 - February 23, 1973
Land Use Planning	February 19 - March 2, 1973
Farm Welding	February 26 - March 2, 1973
Sheep Production	February 26 - March 2, 1973
Advanced Swine Herd Management	March 5 - March 9, 1973

Poultry Production	March 12 - March 16, 1973
Operation & Repair of Farm Tractors	March 12 - March 16, 1973
Power Saw Operation & Safety (Bridgewater)	March 12 - March 16, 1973
Power Saw Operation & Safety	March 19 - March 23, 1973
Woodlot Harvesting (Bridgewater)	March 19 - March 30, 1973
Power Saw Operation & Safety	March 26 - March 30, 1973
Roadside Marketing	March 26 - March 30, 1973
* Two days per week	

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 \$24.00 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.

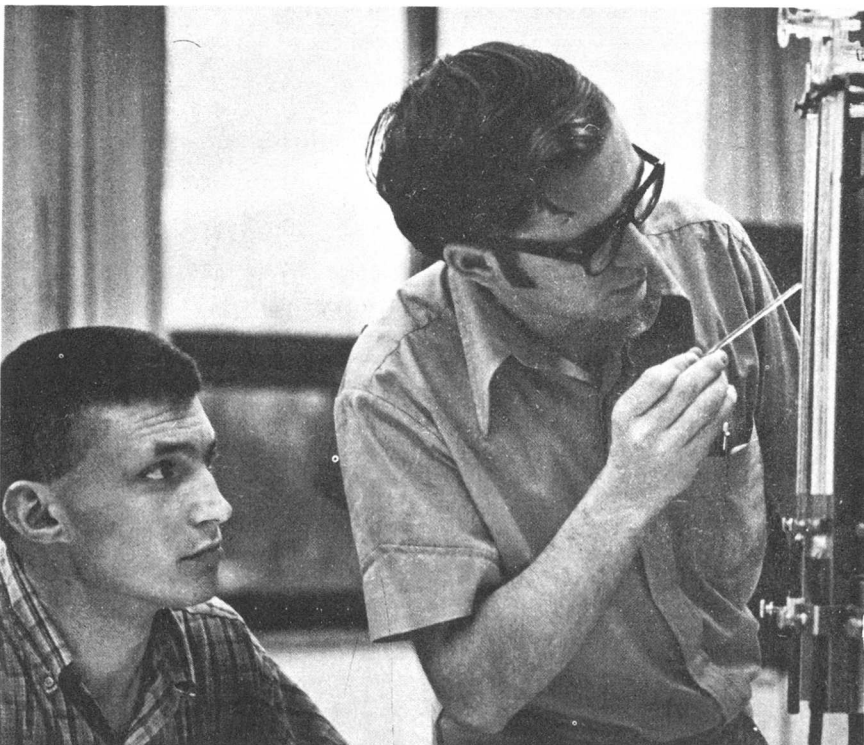
Newfoundland

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.

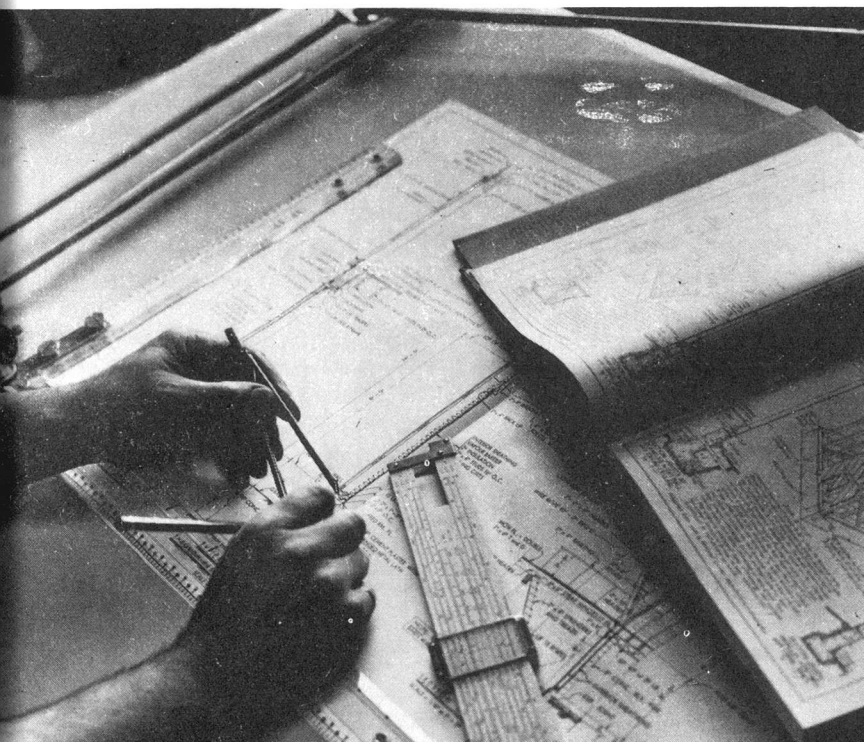
17. P. O. Box 3250, Halifax South Postal Station, Halifax, N. S.
18. Halifax North Branch, 5450 Cornwallis Street, Halifax, N. S.
19. Sunny Side Shopping Mall, P. O. Box 702, Bedford, N. S.
20. Spryfield, N. S.
21. Dalhousie University Branch, Halifax, N. S.
22. St. Mary's University Branch, Halifax, 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



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.

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.

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.

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 re-

commendation from the Principal, of final school marks of the matriculation year or of the provincial examinations. Application for consideration on the basis of school marks must be made before May 15; candidates with high provincial examination marks or 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 Provincial Education Secretary, Provincial Chapter, I. O. D. E., 5677 Victoria Road, Halifax, N. S.

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.

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.

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 1972-73 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 Sco-

tian 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.

THE VICIOUS CIRCLE SOCIETY SCHOLARSHIP

A small number of graduates of the Degree classes of 1966 and 1967 who call themselves the Vicious Circle Society have established a scholarship of \$200. for a worthy Canadian student in the final year of the Degree Course. A reasonable academic standing and financial need will be taken into consideration in determining the winner. 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

(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.

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.

KETCHUM MANUFACTURING COMPANY LIMITED SCHOLARSHIP

The Ketchum Manufacturing Company Limited has provided a \$1000. Dominion of Canada Bond, the interest on which is to be used for an annual scholarship available to a Nova Scotia Agricultural College graduate registered in an Animal Husbandry option. The scholarship will be awarded to a worthy student with a satisfactory academic standing. Application for this scholarship must be made to the Registrar before April 15 of the applicant's last year at the Nova Scotia Agricultural College.

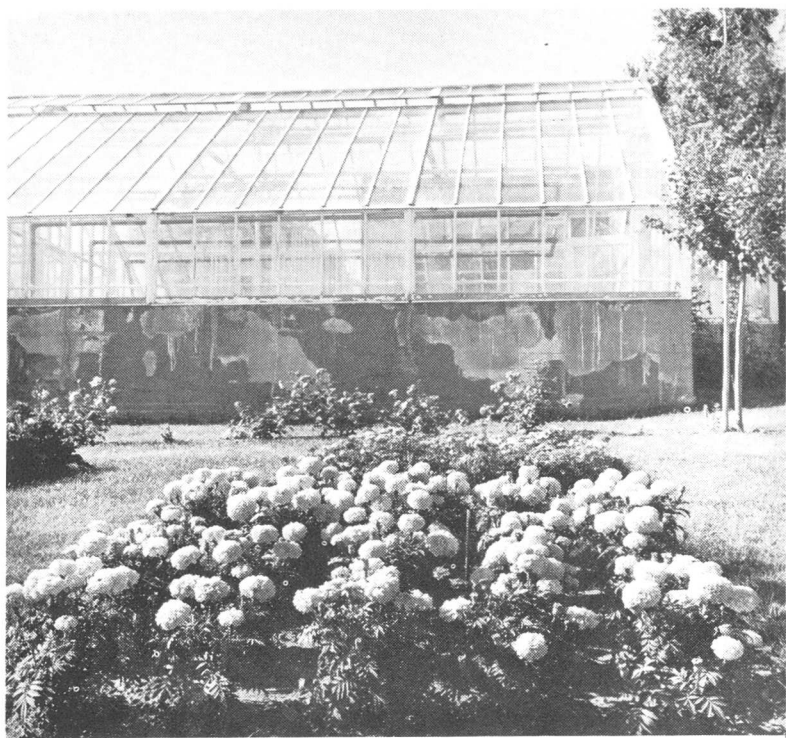
MARITIME CO-OPERATIVE SERVICES LIMITED SCHOLARSHIP

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:

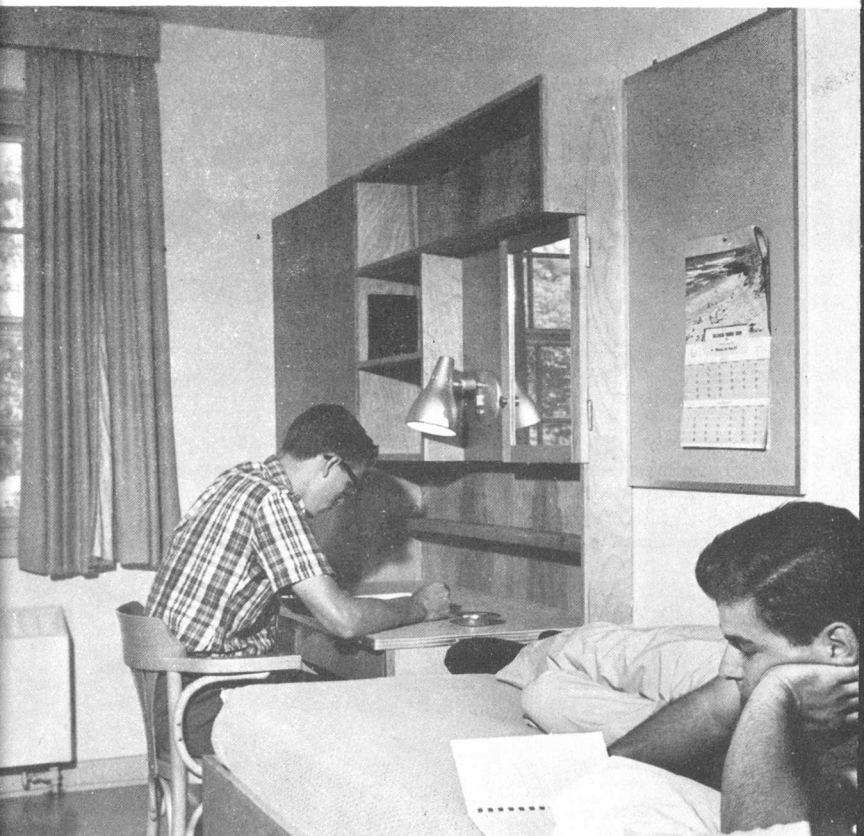
- (a) scholastic ability,
- (b) financial need,
- (c) knowledge and appreciation of co-operatives.

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

Applications must be submitted to the Registrar by April 1.



DIRECTORY
OF STUDENTS



Nova Scotia Agricultural College

Enrollment 1972-73

FIRST YEAR DEGREE

- M. I. Andresen, R. R. 1, Beaches Rd., Pictou, N. S.
J. R. Atkinson, Box 22, Amherst, N. S.
L. R. Barnes, Topsail, Conception Bay, Newfoundland
M. R. Belliveau, 674 Mountain Road, Moncton, N. B.
H. A. Best, Berwick, R. R. 2, N. S.
W. S. Bissett, Dartmouth, R. R. 1, N. S.
J. F. Boiduk, 2 Meadow Street, Amherst, N. S.
K. G. Bradley, R. R. 2, Clifton Royal, N. B.
J. F. Brennan, Bath, R. R. 1, N. B.
Miss G. J. Brown, Windsor, R. R. 1, N. S.
J. A. Brown, Sussex, R. R. 3, N. B.
G. W. Burton, 12 Patterson Ave., Dartmouth, N. S.
D. K. Clark, North Sydney, R. R. 2, N. S.
R. B. Clark, Long Creek, P. E. I.
C. C. Cohlmeier, 2627 Pembina Hwy., Winnipeg 19, Man.
Miss L. A. Coleman, 15 Spruce Terrace, Fredericton, N. B.
G. K. Collicutt, O'Leary, R. R. 1, P. E. I.
R. D. Compton, Summerside, R. R. 1, P. E. I.
D. A. Conrad, 245 Brunswick St., Truro, N. S.
J. Crosby, 1988 Rosebank Ave., Halifax, N. S.
E. A. Cyr, 461 Second Street, Glace Bay, N. S.
R. K. deHaan, Truro, R. R. 3, N. S.
Miss G. M. Densmore, Densmore Mills, Hants Co., N. S.
E. K. Dookie, Lot 7C Ogle Front, East Coast Demerara, Guyana, S. A.
Miss L. H. Duncan, Aylesford, R. R. 3, N. S.
R. D. Dunphy, Site 73, Box 6, Torbay Rd., St. John's, Nfld.
J. C. Ennis, Greenfield, P. E. I.
Miss A. P. Fenton, Clarksville, Hants Co., N. S.
A. T. Finnamore, Box 272, Fredericton, N. B.
W. J. Fitzpatrick, Mount Stewart P. O., P. E. I.
Miss A. O. Fraser, Milford, Hants Co., N. S.
R. M. Fraser, East Quoddy, Halifax Co., N. S.
J. S. Gallagher, 1981 Lisbon Rd., Lewiston, Maine
A. D. Hamilton, 71 Dominion St., Truro, N. S.
D. M. Harding, 262 Winnipeg Crescent, CFB Chatham, N. B.
J. S. Harvie, Canning, R. R. 5, N. S.
B. C. Hawkins, Kennetcook, Hants Co., N. S.
S. S. Healy, Box 607, Kentville, N. S.
G. A. Henderson, Scotsburn, R. R. 2, N. S.
J. K. Hirtle, R. R. 1, Hopewell, N. S.
P. G. Hodge, 1341 Prince Street, Truro, N. S.
Miss R. A. Holland, 329 Ryan Road, Moncton, R. R. 8, N. B.
P. F. Howard, 44 White Street, Dartmouth, N. S.
M. F. Jackman, 67 Blowers Street, Sydney, N. S.
R. S. Jefford, Kelligrews, Conception Bay, Nfld.
M. J. Kieley, Jr., P. O. Box 39, Holyrood, Nfld.

L. G. Kilpatrick, Jr., Florenceville, N. B.
 K. J. LaPierre, Herring Cove P. O., Halifax Co., N. S.
 Miss S. L. Latimer, Tatamagouche, R. R. 1, N. S.
 B. D. Leck, 39 Ernest Ave., Dartmouth, N. S.
 A. B. Lidstone, Holyrood, Nfld.
 M. F. Lomond, 48 Brook St., North Sydney, N. S.
 Miss D. R. Lowe, Bridgewater, R. R. 1, N. S.
 T. E. Matheson, R. R. 2, Scotsburn, N. S.
 R. W. Maynard, Tyne Valley, R. R. 1, P. E. I.
 N. J. G. Miller, Margaree, N. S.
 J. E. Moeller, 71 Braemore Ave., Antigonish, N. S.
 Miss F. M. Morrison, Truro, R. R. 3, N. S.
 W. L. Morse, 13 Oakwood Ave., Dartmouth, N. S.
 Miss L. L. Mullins, 385 McLaughlin Dr., Moncton, N. B.
 Miss T. L. Munro, Box 2174, Springhill, N. S.
 P. K. Murray, 90 Churchill St., Truro, N. S.
 Miss S. C. McCrossin, 126 Douglas Ave., Saint John, N. B.
 R. J. MacDonald, Souris Line Rd., Souris, P. E. I.
 C. W. MacFarlane, Ripples, R. R. 2, N. B.
 R. S. McKay, 160 Campbell Rd., Kentville, N. S.
 R. D. MacLennan, 85 Churchill St., Truro, N. S.
 Miss J. J. MacLeod, Cardigan, R. R. 3, P. E. I.
 Miss G. A. C. MacNeil, Benacadie West, Cape Breton, N. S.
 R. W. MacNeil, 29 Dickie St., Trenton, N. S.
 E. R. McNutt, Truro, R. R. 6, N. S.
 Miss R. L. Ogden, 1284 Manawagonish Rd., St. John, N. B.
 E. J. O'Reilly, 9 Morrison Place, St. John's, Nfld.
 W. D. Pearce, 1097 Allard Ave., Verdun 204, Quebec
 W. L. Perry, 150 Main St., Truro, N. S.
 S. F. Peters, Brookfield, R. R. 3, N. S.
 P. L. Pickett, Andover, R. R. 1, N. B.
 Miss M. J. Porter, Kentville, R. R. 1, N. S.
 Miss S. L. Reesor, 12 Woodland Ave., Dartmouth, N. S.
 Miss B. D. Ross, Belfast, R. R. 4, P. E. I.
 K. A. Smarzik, 5 - 4th Range, St. Denis-sur-Richelieu, Quebec
 D. I. Smith, 46 Court St., North Sydney, N. S.
 Miss D. E. Spracklin, 7142 Royal Pine Ave., Halifax, N. S.
 J. H. Steeves, 65 Madison Ave., Moncton, N. B.
 K. M. Taggart, 109 Park St., Truro, N. S.
 D. K. Thompson, 262 Bentinck St., Sydney, N. S.
 D. P. Thornton, Woodstock, R. R. 1, N. B.
 J. B. Tobin, 115 Union St., Sydney, N. S.
 Miss H. L. Tweedy, Vernon Bridge, R. R. 1, P. E. I.
 D. F. Walker, Sussex, R. R. 5, N. B.
 Miss L. D. Wallace, Wallace, R. R. 1, N. S.
 Miss E. A. Walshe, Bathurst, R. R. 2, Box 162, N. B.
 R. M. Watson, Grand Falls, R. R. 3, N. B.
 G. L. West, Waterville, R. R. 2, N. S.
 R. C. Wilkie, 10 Moulton Ave., North Sydney, N. S.
 B. C. Wilson, Stanley, R. R. 1, N. B.
 T. L. Wood, Scotch Village, R. R. 1, Hants Co., N. S.

SECOND YEAR DEGREE

- M. D. Anderson, Hampton, R. R. 2, N. B.
K. W. Beausejour, Debert, R. R. 1, N. S.
R. F. Bennett, 261 South Street, Glace Bay, N. S.
A. A. Bishop, Wolfville, R. R. 2, N. S.
B. D. Bishop, River de Chute, N. B.
J. S. T. Bowman, P. O. Box 46, Petitcodiac, N. B.
I. J. Breau, 95 Cornhill St., Moncton, N. B.
W. J. Brown, Windsor, R. R. 1, N. S.
A. J. Campbell, P. O. Box 53, Port Hawkesbury, N. S.
Miss D. J. Campbell, South West Lot 16, Miscouche, P. E. I.
A. D. Cole, Middle Musquodoboit, R. R. 3, N. S.
K. A. Curran, Mount Stewart, R. R. 5, P. E. I.
R. L. Cutcliffe, Carleton Siding, P. E. I.
J. D. Davidson, R. R. 1, Bass River, N. S.
E. N. DeMerchant, Perth, R. R. 2, N. B.
E. L. Fage, Amherst, R. R. 5, N. S.
B. W. Hicks, P. O. Box 424, Hartland, N. B.
P. J. Hominick, 40 Breton Street, Sydney, N. S.
Miss J. A. Illsley, Truro, R. R. 5, N. S.
I. A. L. Joseph, Rosignol Village, West Coast Berbice, Guyana, S. A.
G. F. Lutes, R. R. 1, Moncton, N. B.
Miss V. J. Mingo, Truro, R. R. 3, N. S.
R. L. Mitchell, 12 Archibald St., Truro, N. S.
P. G. Moore, Oxford, N. S.
B. W. McCurdy, 640 Prince St., Truro, N. S.
J. I. MacDonald, Mount Stewart, R. R. 5, P. E. I.
M. A. MacEachern, Tatamagouche, R. R. 3, N. S.
D. W. McIsaac, Florenceville, N. B.
D. R. MacKenzie, Scotsburn, R. R. 2, N. S.
B. R. Neaves, Kentville, R. R. 3, N. S.
A. H. F. Oderkirk, Port Howe, N. S.
W. B. Palmer, Freeland, Ellerslie, R. R. 2, P. E. I.
P. L. Parlee, Apohaqui, R. R. 2, N. B.
P. R. Richardson, Lord's Cove, Deer Island, N. B.
M. M. Richardson, New Glasgow, R. R. 4, N. S.
W. L. Smith, Amherst, R. R. 4, N. S.
L. G. Snyder, Jacquet River, R. R. 1, N. B.
S. L. Taylor, 474 Bedford Hwy., Prince's Lodge, Halifax, N. S.
L. F. Walsh, R. R. 2, Box 162 Bathurst, N. B.
P. H. C. Weaver, Elmsdale, Hants Co., N. S.
D. L. Wells, Box 175, Chatham, N. B.
Miss L. G. Whiteway, Montague, R. R. 1, P. E. I.
L. S. Yeo, Charlottetown, R. R. 3, P. E. I.

THIRD YEAR DEGREE

- C. L. B. Morrison, Shore Rd., Eastern Passage, N. S.
M. P. Muise, Quinan, Yarmouth Co., N. S.
J. T. Rogers, 4 Chisholm St., Sydney Mines, N. S.

FIRST YEAR TECHNICIAN

- R. H. Adams, Ellerslie, R. R. 2, P. E. I.
 D. L. Angevine, 25 Hillside Ave., Truro, N. S.
 L. V. Anthony, Yarmouth, R. R. 2, N. S.
 Miss K. A. Atworth, Upper Woodstock, N. B.
 J. A. Apestiguy, 66 Regent Street, North Sydney, N. S.
 W. A. E. Bhola, 15 Chadwick Street, Dartmouth, N. S.
 J. D. Boulter, Victoria Lot 29, P. E. I.
 M. F. Bradley, 187 Dorchester St., Charlottetown, P. E. I.
 R. J. Bradley, Port Elgin, R. R. 3, N. B.
 P. G. Brown, Aylesford, R. R. 3, N. S.
 P. J. Bulger, Portage, P. E. I.
 Miss S. L. Butler, Granville Ferry, N. S.
 G. R. Churchill, Box 121, Yarmouth, N. S.
 R. E. Clark, Kensington, R. R. 5, P. E. I.
 J. J. Currie, R. R. 1, Marion Bridge, N. S.
 R. P. Davis, 98 Burnyeat St., Truro, N. S.
 W. H. Davison, Newport, R. R. 3, N. S.
 Miss B. J. Dickinson, Woodstock, R. R. 5, N. B.
 R. A. Douglas, 36 Aberdeen St., Truro, N. S.
 E. A. Dugas, Beaver Harbour, N. B.
 Miss M. A. Eikelenboom, Box 103, Shubenacadie, N. S.
 J. W. Eisener, 650 Portland St., Dartmouth, N. S.
 D. G. Eisener, 700 Portland St., Dartmouth, N. S.
 E. G. Ellis, O'Leary, P. E. I.
 D. A. Ellsworth, P. O. Box 306, R. R. 2, Corner Brook, Nfld.
 C. W. Erb, Sussex, R. R. 5, N. B.
 B. K. Forrest, Box 1, Oxford, N. S.
 B. D. Forsyth, Coldbrook, N. S.
 P. B. Fraser, Bear River, Box 10, Digby Co., N. S.
 E. W. Fredericks, 5 Waynewood Dr., Dartmouth, N. S.
 Miss T. E. Gaudet, 76 Hester Street, Dartmouth, N. S.
 J. E. Grant, Aroostook, N. B.
 K. I. Grant, 24 Simpson St., Glace Bay, N. S.
 M. H. Halman, Charlottetown, R. R. 5, P. E. I.
 J. G. Hamilton, 2835 Dutch Village Rd., Halifax, N. S.
 R. K. Hansen, New Denmark, N. B.
 V. B. Harbers, Wolfville, R. R. 3, N. S.
 P. C. Helliwell, 4 John Cross Drive, Dartmouth, N. S.
 Miss K. A. V. Hilchie, Burncoat, Hants Co., N. S.
 B. C. Hood, 1665 King St., Curry's Corner, Windsor, N. S.
 R. G. Horton, Great Village, R. R. 1, N. S.
 J. L. Houghton, Centreville, R. R. 3, Kings Co., N. S.
 D. A. Hyslop, Moore's Mills, R. R. 2, N. B.
 S. A. Johnson, 201 Brunswick St., Truro, N. S.
 Miss C. M. C. Kelly, Apt. 8, 15 Plateau Crescent, Halifax, N. S.
 J. H. Kinsman, Cambridge Station, R. R. 2, N. S.
 R. H. Martin, 4 Pine Bud Place, St. John's, Nfld.
 P. D. Matheson, 820 Water St., Summerside, P. E. I.
 W. T. Matthew, 33 Glover Shore Rd., Summerside, P. E. I.
 R. E. Melanson, P. O. Box 68, Mill Village, Queens Co., N. S.

E. G. Mintis, Cambridge Station, N. S.
 H. C. Mitchell, 17 Stonehaven Rd., Halifax, N. S.
 M. A. Mitchell, Brookside, R. R. 2, Armdale, Halifax Co., N. S.
 Miss S. M. Mooers, 404 Needham Street, Fredericton, N. B.
 L. A. Morton, 15 Highland Crescent, Dartmouth, N. S.
 R. A. McCamon, Coldbrook Station, Kings Co., N. S.
 D. F. McCarthy, Elmsdale, R. R. , P. E. I.
 R. R. MacDonald, 115 Caledonia St., North Sydney, N. S.
 K. K. MacDougall, O'Leary, R. R. 1, P. E. I.
 B. R. McIntosh, Glassville, N. B.
 T. B. MacLean, 1397 Prince St., Truro, N. S.
 Miss V. F. MacLean, Clyde River Rd., Cornwall, R. R. 2, P. E. I.
 J. M. Nicholson, Crapaud, P. E. I.
 H. R. Pelkey, Bristol, R. R. 1, N. B.
 L. P. C. Phelan, Morell, R. R. 2, P. E. I.
 V. R. Phillips, O'Leary, R. R. 2, P. E. I.
 J. D. Purdy, 176 Brunswick St., Truro, N. S.
 E. A. Redden, R. R. 2, Middle Musquodoboit, N. S.
 L. W. Robinson, Petitcodiac, Box 40, N. B.
 J. B. Rodd, North Milton, Winsloe, R. R. 2, P. E. I.
 A. C. Schop, Aylesford, R. R. 3, N. S.
 J. W. Shelby, Great Village, Box 14, N. S.
 B. N. Smith, Florenceville, N. B.
 Miss T. L. Stace, 55 Dte. Rose Blvd., Ste. Rose de Laval, Quebec
 D. J. Steele, Canning, R. R. 3, N. S.
 V. L. Steeves, Elgin, Albert Co., N. B.
 R. Sterling, 64 Trafalgar St., Charlottetown, P. E. I.
 G. W. Stiles, Petitcodiac, Box 256, N. B.
 H. R. Stirling, Wolfville, R. R. 3, N. S.
 Miss M. R. Stull, 440 Prince St., Truro, N. S.
 D. F. Tait, 28 Pleasant St., Shediac, N. B.
 Miss L. E. Thistle, 53 Mahon Street, New Waterford, N. S.
 E. C. Tilley, 22 Beach St., Glace Bay, N. S.
 I. R. Trafford, Florenceville, N. B.
 B. C. Trueman, Amherst, R. R. 4, N. S.
 C. J. vanDiepen, Morell, R. R. 2, P. E. I.
 Miss H. A. Wallace, 44 Prince St., Yarmouth, N. S.
 T. C. Webber, 130 Hamilton Ave., St. John's, Nfld.
 D. A. Wentzell, 59 Walnut Street, Bridgewater, N. S.
 C. B. Whiteley, 16 Drummond St., Moncton, N. B.
 Miss C. A. Woodroffe, Eureka, Pictou Co., N. S.
 R. M. Yeo, 301 East Drive, St. Eleanors, P. E. I.

SECOND YEAR TECHNICIAN

J. G. Baillie, Tatamagouche, R. R. 4, N. S.
 S. A. Bishop, Wolfville, R. R. 2, N. S.
 R. T. Ballam, 6535 Summit St., Halifax, N. S.
 S. E. Boudreau, R. R. 1, Church Point, N. S.
 Miss D. M. Breen, MacQuarrie Ave., Westville, N. S.
 J. J. Brennan, Jr., Bath, R. R. 1, N. B.
 M. C. Brooks, Glassville, N. B.

C. E. Corkum, Port Williams, N. S.
 G. A. Craig, R. R. 1, Charlo, N. B.
 D. P. Croft, Canning, N. S.
 A. J. Crossan, River John, R. R. 4, N. S.
 B. M. Curry, Truro, R. R. 5, N. S.
 L. P. Dalton, 162 Dorchester St., Charlottetown, P. E. I.
 R. S. Dean, Middle Musquodoboit, R. R. 4, N. S.
 H. A. Duivenvoorden, Armstrong Brook, N. B.
 H. G. Duivenvoorden, P. O. Box 47, Durham Center, N. B.
 C. L. Eaton, Port Williams, R. R. 1, N. S.
 Miss D. L. Freeman, Bear River, R. R. 1, N. S.
 P. J. Gaunce, Sussex, R. R. 1, N. B.
 K. C. Gorveatt, 170 Upper Queen St., Charlottetown, P. E. I.
 S. D. Grant, 84 Melrose Terrace, Truro, N. S.
 J. F. Hampton, Truro, R. R. 5, N. S.
 P. G. Hatton, Morell, P. E. I.
 Miss S. G. Holder, Aphaqui, R. R. 2, N. B.
 Miss W. J. Holleman, Waterville, R. R. 2, N. S.
 C. O. Keddy, Kentville, R. R. 1, N. S.
 Miss S. P. M. Kennedy, 156 Coventry Crescent, Fredericton, N. B.
 P. W. Knight, Youngs Cove Road, N. B.
 V. N. Little, Harvey Station, N. B.
 R. L. Lundrigan, 92 Country Rd., Corner Brook, Nfld.
 K. F. Martin, Stanhope, York P. O., P. E. I.
 R. P. Mitchell, Winsloe, R. R. 1, P. E. I.
 S. A. Mitchell, Margaretsville, Anna. Co., N. S.
 W. J. Morley, P. O. Box 5, East Bay, N. S.
 Miss D. L. Morrison, Moncton, R. R. 6, N. B.
 Miss L. A. McAllister, 244 West Lane, Moncton, N. B.
 G. W. McCaffrey, R. R. 1, Oromocto, N. B.
 B. W. MacCallum, Bedeque, P. E. I.
 A. H. MacRae, Charlottetown, R. R. 7, P. E. I.
 R. E. Palmeter, North Grand Pre, N. S.
 A. M. Paul, Ferryland, Nfld.
 P. S. Pedersen, Box 333, Amherst, N. S.
 M. R. Pierce, Denmark, R. R. 1, N. S.
 Miss Y. F. Richard, R. R. 4, Rogersville, N. B.
 J. A. Robertson, 380 MacDonald St., New Glasgow, N. S.
 S. F. Saunders, Weston, Kings Co., N. S.
 C. B. Selig, Truro, R. R. 2, N. S.
 J. W. Steeves, Elgin, R. R. 4, N. B.
 L. W. Steeves, Elgin, N. B.
 W. E. Thompson, Southampton, R. R. 3, N. S.
 Miss A. M. Tims, 97 Forest Hill, Fredericton, N. B.
 T. C. VanGaal, Aroostook, R. R. 1, N. B.
 B. Watson, Perth, R. R. 2, N. B.
 Miss G. H. Wier, 12 Hillcrest Drive, Coxheath, N. S.
 C. H. Winter, P. O. Box 4094, St. John's, Nfld.

FIRST YEAR TECHNOLOGIST

G. R. Amon, Great Village, R. R. 1, N. S.
Miss S. E. Anderson, Debec, R. R. 5, N. B.
Miss D. McG. Archibald, 431 Robie St., Truro, N. S.
J. M. Atkinson, 6 Pine Street, Dartmouth, N. S.
Miss N. A. Eisener, 700 Portland St., Dartmouth, N. S.
D. B. Evans, 25 High St., North Sydney, N. S.
Miss L. C. Everett, Fredericton, R. R. 6, N. B.
C. F. Ford, 6418 London St., Halifax, N. S.
Miss M. J. Hill, 825 Montgomery Ave., Riverview, N. B.
Miss T. L. Johnson, 17 College Rd., Truro, N. S.
M. S. Kelly, 126 Sydney St., Charlottetown, P. E. I.
Miss C. M. Keyes, Fredericton, R. R. 2, N. B.
J. LeR. Moore, Oxford Junction, N. S.
Miss D. A. MacLean, 52 Saskatoon Dr., Halifax, N. S.
Miss M. A. Parsons, P. O. Box 736, Windsor, N. S.
Miss K. A. Perry, 349 Cedar Ave., Summerside, P. E. I.
Miss A. N. Phillips, 11 Parker St., Truro, N. S.
Miss C. D. Robichaud, Box 137, Richibouctou, R. R. 1, N. B.
Miss S. G. Russell, Sheet Harbour, R. R. 2, N. S.
H. B. Steeghs, Box 333, R. R. 1, Ohio, Antigonish, N. S.
S. A. Yuill, Truro, R. R. 1, N. S.

SECOND YEAR TECHNOLOGIST

Miss L. R. Ballem, 2891 Doug Smith Dr., Halifax, N. S.
D. S. Crosby, Charlottetown, R. R. 7, P. E. I.
Miss M. Kell, West St., Westville, N. S.
J. B. Lamb, Berwick, R. R. 2, N. S.
G. W. Long, Albert, N. B.
Miss D. E. Merrill, R. R. 5, Cookshire, Quebec
Miss A. E. McGlynn, 32 Black St., Box 11, Site 1, Moncton, R. R. 5, N. B.
Miss J. E. Shewchuck, Tower Road, Cape Breton, N. S.

SPECIAL STUDENTS

G. F. Barnes, 2183 Barrington, St., Halifax, N. S.
E. Blades, N. S. A. C., Truro, N. S.
C. B. Eveleigh, Sussex, R. R. 3, N. B.
J. R. Farquhar, Perth, R. R. 2, N. B.
R. H. Fraser, 20 Barrow St., Truro, N. S.
Miss H. M. Freeman, 22 Dartmoor Crescent, Bedford, N. S.
F. M. Hanham, 321 Robie St., Truro, N. S.
A. J. Miller, Shubenacadie, R. R. 4, N. S.
Mrs. M. Eugene MacDonald, Box 81, Thorburn, N. S.
D. W. Powell, Bridgetown, R. R. 4, N. S.
Mrs. S. J. Sampson, N. S. A. C., Truro, N. S.
K. R. Silver, N. S. A. C., Truro, N. S.
Mrs. R. Thomson, Greenfield, N. S.
W. E. Thompson, Oxford, R. R. 2, N. S.
C. G. Trenholm, 17 Andy's Ave., Truro, N. S.
Miss S. Terry, Truro, N. S.

